CHAPTER 5

Access to hospice and certain complex palliative services for beneficiaries with end-stage renal disease or cancer

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In this chapter

Chapter summary

The Medicare hospice benefit covers palliative and supportive services for terminally ill beneficiaries who choose to enroll. Hospice is a model of care focused on symptom management and quality of life and can enable beneficiaries to receive end-of-life care at home (rather than in the hospital) if they wish to do so. The decision of whether to elect hospice is a deeply personal one for a beneficiary and their family, informed by discussions with their physician and health care providers about disease progression, prognosis, and options for care. While it is important that eligible beneficiaries have the option to enroll in hospice care, it is also important that they can choose not to enroll in hospice care and continue to receive conventional care if they prefer.

When a beneficiary enrolls in hospice, the hospice provider assumes all financial risk for costs of services that are reasonable and necessary for palliation of the patient's terminal condition and related conditions. According to Medicare policy, services that are unrelated to the terminal illness and related conditions continue to be covered outside of the hospice benefit, though CMS has stated that "virtually all" services at the end of life are related to the terminal condition and thus the responsibility of the hospice provider. Medicare generally pays the hospice provider a prospective daily rate that is not affected by the number of visits or other

services a hospice furnishes on a given day. Fee-for-service (FFS) Medicare pays for hospice care for beneficiaries enrolled in either traditional FFS Medicare or Medicare Advantage.

In the hospice proposed rules for fiscal year (FY) 2024 and FY 2025, CMS raised questions about access under the hospice benefit to certain "complex palliative treatments," that is, certain high-cost complex services that may be palliative (i.e., provide symptom relief) for some hospice beneficiaries—specifically, dialysis for beneficiaries with end-stage renal disease (ESRD) and radiation, blood transfusions, and chemotherapy for beneficiaries with cancer. Medicare does not collect information on the provision of these complex palliative services on the claims that hospice providers submit to CMS. As a result, policymakers lack information to assess hospice enrollees' use of such services and whether Medicare's payment policy serves as a barrier to accessing such services.

We conducted interviews with clinicians (including those specializing in palliative medicine, nephrology, and oncology), hospice providers, dialysis providers, and family caregivers in 2024 and 2025 to learn their perspectives on the current level of access that beneficiaries in hospice have to such services. Clinicians and relevant specialists we interviewed varied in their perspectives on whether and when they consider these services to be palliative and consistent with the hospice benefit criteria and explained the considerations they give to an individual patient's situation and type of service. We found general consensus among our interviewees that dialysis, radiation, and blood transfusions can provide symptom relief for some hospice patients, but there was less consensus around the role of chemotherapy in symptom relief for hospice patients. Interviewees reported that dialysis and blood transfusions may extend life expectancy by weeks or months for hospice-eligible beneficiaries, depending on the timing of hospice enrollment. Three commonly reported reasons for furnishing these services included providing symptom relief, easing the transition to hospice, or helping patients reach specific goals (e.g., attending a family wedding). Interviewees indicated that some patients with ESRD or cancer do not enroll in hospice or enroll very near the end of life due to concerns about ceasing treatments like dialysis or blood transfusions. Interviewees also reported that the cost of dialysis, radiation, blood transfusions, and some chemotherapy generally exceeds the Medicare hospice daily payment rate (for routine home care), though the cost of providing the services varied by a hospice's ability to negotiate rates and execute contracts with dialysis facilities and hospitals/clinics. The cost of ambulance transportation, if needed due to a patient's condition, can add significantly to the cost of providing these services.

We also conducted an analysis of available Medicare data (claims, cost reports, and hospice enrollment data) to ascertain what can be known about the use of hospice and certain services under the hospice benefit for beneficiaries with ESRD or cancer. A key limitation is that Medicare lacks patient-level data (via claims or other sources) on hospices' provision of complex services under the hospice benefit. Based on available data, we found that:

- Medicare beneficiaries with ESRD receiving maintenance dialysis who are near the end of life are less likely than other terminally ill beneficiaries to enroll in hospice. In 2024, 31 percent of Medicare decedents with ESRD enrolled in hospice compared with 53 percent of all Medicare decedents. Further, although hospice use among decedents with ESRD has grown, the rate of growth is lower compared with that of all Medicare decedents. Hospice cost-report data do not break out dialysis costs, and hospice claims do not include information on hospices' provision of dialysis, so the share of hospices that provide dialysis and the share of patients who receive dialysis under the hospice benefit is unknown. FFS claims data show a small share (12 percent) of Medicare decedents with ESRD who enrolled in hospice in 2019 received dialysis that was paid for outside the hospice benefit, presumably because the hospice and dialysis facility considered it to be unrelated to the terminal condition.
- A majority of FFS decedents with blood cancer in 2019 used hospice, though at lower rates and for shorter stays than those with other cancers. Among decedents with blood cancer, those who were transfusion dependent were slightly more likely to use hospice but had shorter hospice stays than those who were not transfusion dependent. Few hospice beneficiaries with cancer received antineoplastics (chemotherapy) during their hospice stay in 2017, the last full calendar year that hospices were required to report their provision of drugs on hospice claims. In 2023, only about 3 percent of freestanding hospices reported costs for palliative radiation, and about 1 percent reported costs for palliative chemotherapy on their cost reports. (Hospice cost-report data are not available for blood transfusions.) However, costs for these services may not be accurately or fully reported (e.g., some hospice providers may report costs for these services under other categories).

To better understand how Medicare's current payments to hospices compare with the costs of these services over a hospice stay, we estimated the cost of providing dialysis treatments, blood transfusions, and radiation for palliative purposes during a hospice stay relative to Medicare's payment to hospices for a stay under different hypothetical scenarios. Because we lack data on the provision of these treatments during hospice stays, the comparisons rely on assumptions about service utilization and costs. They are meant to be illustrative only and to give a rough sense of the orders of magnitude. Across the scenarios, we find that over the course of a hospice stay:

- estimated treatment costs for dialysis could range from roughly 40 percent to 50 percent of total hospice payments,
- estimated treatment costs for blood transfusions could range from roughly 30 percent to 50 percent of total hospice payments, and
- estimated treatment costs for radiation could range from less than 10 percent of total hospice payments to over 30 percent.

Complex palliative treatments could represent a substantial portion of Medicare's hospice payment (which is intended to cover all services provided during the stay); such an occurrence is not necessarily problematic in a prospective payment system (PPS) like the one used by Medicare to pay for hospice services. A PPS assumes that providers will earn a profit on some cases and incur a loss on others but that, on average, payment will be reasonably aligned with costs. However, if patients with certain conditions or characteristics are predictably more costly than others, a PPS can create incentives for providers to avoid those costs by not admitting such patients or by not furnishing costly services.

Policymakers concerned about hospice beneficiaries' access to certain complex palliative services could consider a number of approaches. First, to learn more about beneficiary access to such services before considering the need for modifications to the hospice payment system, CMS could, for a limited period, collect data from hospice providers about the use of certain high-cost complex palliative services. Next, if policymakers determine that changes are warranted to improve payment accuracy for hospice patients receiving complex palliative services, two options to change the hospice PPS in a budget-neutral manner (funded by a percentage reduction to the hospice base rate for all providers) could be considered:

- An outlier policy that would direct additional payments to hospice providers who incur higher costs for providing certain palliative services.

This approach would maintain the bundled nature of the hospice PPS while improving payment accuracy, thus preserving incentives for providing efficient care and flexibility in how providers deliver care. This approach would also ensure that financial risk is shared between hospice providers and the Medicare program. However, some stakeholders might view outlier payments, which pay for only a portion of the additional costs associated with high-cost services, as insufficient.

- Add-on payments for the provision of certain high-cost palliative services. This approach would increase incentives for hospices to furnish these services to beneficiaries but would also create incentives to furnish costly services even when they are not palliative or not aligned with the patient's plan of care. Incorporating ways to minimize adverse financial incentives, such as by limiting the amount of add-on payments a hospice could receive, may help safeguard against this possibility.

As an alternative to changing the hospice PPS, policymakers could consider a voluntary transitional program through the CMS Innovation Center that would offer hospice enrollees the option to receive certain services such as dialysis or blood transfusions for some transitional period, or up to a specified number of treatments, paid for outside of the hospice benefit. A voluntary transitional program could help ease the transition to hospice for dialysis- and transfusion-dependent beneficiaries who are near the end of life and wish to enroll in hospice. A transitional program for beneficiaries with ESRD receiving maintenance dialysis or beneficiaries with cancer who are dependent on blood transfusions could give the Secretary the opportunity to, in a limited fashion, directly test transitional concurrent care for hospice enrollees for services where access concerns have been raised by stakeholders. In developing a transitional model, the agency would need to consider a number of design issues, including how to structure a transitional program, how to promote close collaboration between the specialist administering the transitional treatments and the hospice physician, and how to minimize the potential for unintended financial incentives or undermining the hospice benefit criteria.

Overall, in considering approaches to improve the accuracy of Medicare's payments for hospice services and address potential concerns about access to care, policymakers should maintain payment incentives for efficiency, target any additional payments toward providers that are furnishing high-cost, complex services, and structure any changes to minimize vulnerability to fraud and abuse. ■

The hospice benefit covers palliative and supportive services for terminally ill beneficiaries with a life expectancy of six months or less if the illness runs its normal course. When a beneficiary chooses to enroll in hospice, the hospice provider assumes all financial risk for costs of services that are reasonable and necessary for palliation of the patient's terminal condition and related conditions. Medicare generally pays the hospice provider a prospective daily payment that is not affected by the number of visits or other services a hospice furnishes on a given day. Payments are made according to a fee schedule that has four levels of care.

In the hospice proposed rules for fiscal year (FY) 2024 and FY 2025, CMS raised questions about access to care under the hospice benefit for certain high-cost complex services that may be palliative (i.e., provide symptom relief) for some hospice patients—specifically, dialysis for beneficiaries with end-stage renal disease (ESRD) and radiation, blood transfusions, and chemotherapy for beneficiaries with cancer (Centers for Medicare & Medicaid Services 2024b, Centers for Medicare & Medicaid Services 2023).[1] The agency requested information on a range of issues related to beneficiaries' access to these services and barriers that hospices may face in furnishing such services. CMS sought comment on whether additional payment was warranted when hospices furnish these complex palliative services and how such payment might be structured:

- In the FY 2024 hospice proposed rule, CMS raised the issue of access to dialysis, radiation, blood transfusions, and chemotherapy for palliative purposes in hospice (Centers for Medicare & Medicaid Services 2023). CMS stated that "there is a subset of hospice eligible beneficiaries that would likely benefit from receiving palliative, rather than curative, chemotherapy, radiation, blood transfusions, and dialysis."[2] The agency indicated that it had received anecdotal reports from beneficiaries and families that hospice agencies had told them Medicare does not allow for the provision of these types of treatments for patients enrolled in hospice. CMS stated that these types of treatments would be covered under the hospice benefit if the hospice physician, with input from the hospice interdisciplinary group, determined the treatments would be beneficial for a patient's symptom control (and if the patient wished to receive them).
- In the FY 2025 hospice proposed rule, CMS stated that it had received comments from the public that the daily hospice payment rate does not reflect the cost of providing high-cost palliative services (Centers for Medicare & Medicaid Services 2024b). The agency did not propose a specific hospice payment change but sought additional comment on a number of issues that could inform development of a payment mechanism to account for the increased costs of providing complex palliative treatments in hospice.[3]

Between 2024 and 2026, the Commission conducted research about access to hospice and the provision of certain complex palliative services under the hospice benefit for beneficiaries with ESRD (dialysis) and beneficiaries with cancer (blood transfusions, radiation, and chemotherapy).[4] We focused on these beneficiary populations because:

- historically, beneficiaries with ESRD have been less likely to elect hospice compared with all Medicare beneficiaries and because CMS discussed the issue of access to dialysis in hospice (Centers for Medicare & Medicaid Services 2023); and
- although beneficiaries with cancer are more likely to elect hospice than all other hospice-eligible beneficiaries, CMS has received anecdotal reports from beneficiaries and families that hospice agencies have told them Medicare does not allow for the provision of treatments like blood transfusions, radiation, and chemotherapy for palliative purposes under hospice election (Centers for Medicare & Medicaid Services 2023).

We note that Medicare policy permits hospice providers to determine whether they offer services such as dialysis, radiation, blood transfusions, and chemotherapy for palliative purposes. Though we sought to learn more about the palliative services offered to hospice beneficiaries with ESRD or cancer, considerations about the appropriateness of providers' decisions about whether to furnish these services to hospice enrollees and whether such services are consistent with the hospice caregiving philosophy are beyond the scope of this chapter.

In this chapter, we review relevant literature on the role of certain high-cost complex services that may be palliative for some hospice patients and report findings from interviews we conducted with clinicians, hospice providers, dialysis providers, and family caregivers between 2024 and 2025. We also report what can be known, given data limitations, about the use of hospice and certain complex palliative services under the hospice benefit for beneficiaries with ESRD or cancer. In addition, we review how Medicare pays for hospice care and consider whether the hospice payment system creates potential access barriers to certain high-cost complex palliative services for some hospice patients. Finally, we discuss several approaches that policymakers could consider to improve the accuracy of Medicare's payments for hospice services and address potential concerns about access to complex palliative services.

Background

The Medicare hospice benefit is designed to provide pain and symptom relief, comfort, and emotional and spiritual support to eligible beneficiaries with a terminal illness who choose to enroll. The hospice benefit covers services that are reasonable and necessary for palliation of the terminal condition and related conditions. A wide range of palliative services are covered: visits by nurses, aides, social workers, physicians, and therapists; drugs, durable medical equipment, and supplies; short-term inpatient care and respite care; bereavement services for the family; and other services for palliation of the terminal condition and related conditions that are specified in the beneficiary's plan of care.

Medicare permits—but does not require—hospices to provide certain complex services that may be palliative for some patients. According to the *Medicare Benefit Policy Manual* (Sec. 40.2.4, "Special Modalities"), a hospice "may use chemotherapy, radiation therapy, and other modalities for palliative purposes if it determines that these services are needed. This determination is based on the patient's condition and the individual hospice's care giving philosophy" (Centers for Medicare & Medicaid Services 2026b). Similar to how the Commission approaches treatment choices by other types of providers, issues of what mix of palliative services hospice providers choose to offer patients fall outside the scope of this project. Although the Commission has not taken a position on this policy, the text box on pp. 200–201 discusses varied perspectives on the mix of palliative services that hospice providers offer.

Enrollment in the hospice benefit is voluntary; it is a choice made by individual beneficiaries and their families. Patient autonomy and care according to a patient's preferences are important principles in end-of-life care. The decision of whether to elect hospice is a deeply personal one for a beneficiary and their family, influenced by their preferences and beliefs and informed by discussions with their physician and health care providers about disease progression, prognosis, and options for care. Hospice offers beneficiaries the option to receive end-of-life care focused on symptom management and quality of life and can enable some beneficiaries to die at home (rather than in the hospital) if they wish to do so. Hospice offers support to both patients and families as they face the end of life and offers bereavement support for survivors afterward. While it is important that eligible beneficiaries have the option to elect hospice, it is also important that beneficiaries can choose not to enroll in hospice care and remain with conventional care throughout the end of life.

For a beneficiary to be eligible for hospice, they must have a life expectancy of six months or less if their disease runs its normal course. When a beneficiary first elects hospice, two physicians—a hospice physician and the beneficiary's designated attending physician (if any)—certify that the beneficiary meets this life-expectancy criterion. After the first and each subsequent hospice benefit period, a hospice physician can recertify the patient for continued hospice care as long as the patient's terminal illness continues to engender a life expectancy of six months or less. Beneficiaries can disenroll from hospice at any time and can reelect hospice for a subsequent period as long as they meet the eligibility criteria.

When a beneficiary enrolls in hospice, they elect to receive palliative care for their terminal condition and related conditions under the hospice benefit and forgo care related to the terminal illness outside of hospice. When a beneficiary enrolls in hospice, the beneficiary or their representative signs a hospice election statement that includes the individual's or representative's acknowledgement that they have been given a full understanding of the palliative rather than curative nature of hospice care, as it relates to the individual's terminal illness and related conditions. Although hospice providers are not required to use this specific language, CMS provides hospices with a model hospice-election statement that states: "The nature of hospice care is to relieve pain and other symptoms related to my terminal illness and related conditions and such care will not be directed toward cure. The focus of hospice care is to provide comfort and support to both me and my family/caregivers" (Centers for Medicare & Medicaid Services 2020).

Services that are unrelated to the terminal condition and related conditions continue to be covered outside of the hospice benefit by fee-for-service (FFS) Medicare for Part A and Part B services or by a prescription drug plan or Medicare Advantage Prescription Drug plan for Part D drugs. However, CMS guidance on when services are "unrelated" is not specific. CMS has stated in the preamble of regulations that it considers "virtually all" services at the end of life to be related to the terminal condition and thus the responsibility of the hospice provider, while the *Medicare Benefit Policy Manual* indicates that services that are "completely unrelated" or "unrelated" to the terminal condition are eligible for FFS coverage outside of hospice (Centers for Medicare & Medicaid Services 2026a, Centers for Medicare & Medicaid Services 2026b).[5] In our March 2024 report, the Commission noted that MedPAC interviews conducted with hospice providers on the topic of unrelated services suggest that providers differ in how they define "unrelated" (Medicare Payment Advisory Commission 2024).

Medicare pays hospice providers a prospective daily rate for all services that are reasonable and necessary for palliation of the terminal condition and related conditions. Payments to hospice agencies are made according to a fee schedule that has four levels of care: routine home care (RHC), continuous home care (CHC), inpatient respite care (IRC), and general inpatient care (GIP).[6] RHC has two payment levels, a higher rate for the first 60 days of the stay and a lower rate for days 61 and beyond. RHC accounted for nearly 99 percent of hospice days during 2024.

Medicare's daily payment rate to hospice providers is generally not affected by the number of visits or the cost of nonvisit services that the hospice furnishes on a given day.[7] This design of the hospice payment system has been in place since the hospice benefit's outset in 1983. In the final rule establishing the hospice payment system, CMS indicated that it received comments suggesting that there be exceptions to the payment rates for special palliative procedures, such as radiation and chemotherapy. The agency declined, stating that "fragmentation of the rates may provide incentives for hospices to increase the use of 'special procedures'" and that they had included a cost component associated with outpatient hospital services (e.g., radiation or chemotherapy) in the bundled rates (Health Care Financing Administration 1983).

When a beneficiary elects hospice, they designate an "attending physician" to oversee their care. A physician, nurse practitioner, or physician assistant can serve as the designated attending physician and can be employed by the hospice or independent of the hospice (e.g., a physician with whom the beneficiary has a long-standing relationship). Medicare makes a separate payment for a professional service such as an evaluation and management visit furnished by the hospice beneficiary's attending physician.[8]

FFS Medicare pays for hospice care for beneficiaries enrolled in either traditional FFS Medicare or Medicare Advantage (MA). Once a beneficiary in an MA plan elects hospice care, the beneficiary receives hospice services through a provider paid by FFS Medicare (while Medicare continues to pay the MA plan for Part D services and Part C rebates but not Part A and Part B services). In March 2014, the Commission urged that this policy be changed, recommending that hospice be included in the MA benefit package (Medicare Payment Advisory Commission 2014).

The role of complex services that may be palliative for some hospice patients

Services such as dialysis, radiation, blood transfusions, and chemotherapy raise complex issues in the context of hospice. First, because these services can be life extending or palliative or both, depending

Medicare policy on complex palliative services in hospice: Varied viewpoints

The Medicare hospice benefit is designed to provide pain and symptom management, comfort, and emotional and spiritual support to beneficiaries with a terminal illness who elect hospice care. The benefit covers a wide range of palliative services such as nurse, aide, social worker, and physician visits; drugs and durable medical equipment; short-term inpatient and respite care; bereavement services for the family; and other services necessary for palliation of the terminal illness and related conditions. Medicare permits—but does not require—hospices to provide certain complex services that may be palliative for some patients. According to the *Medicare Benefit Policy Manual* (Sec. 40.2.4, "Special Modalities"), a hospice "may use chemotherapy, radiation therapy, and other modalities for palliative purposes if it determines that these services are needed. This determination is based on the patient's condition and the individual hospice's care giving philosophy. No additional Medicare payment may be made regardless of the cost of the services" (Centers for Medicare & Medicaid Services 2026b).

While the reference to a hospice's "caregiving philosophy" is unusual in Medicare policy, other types of providers generally have some discretion in the services they choose to offer. For example, skilled nursing facilities may decide whether to admit patients requiring ventilator care, complex wound care, or infusion therapy. Hospitals vary in their service offerings; for instance, nuclear medicine is optional under the hospital conditions of participation.

Although determinations about the mix of palliative services a hospice should provide fall outside the scope of this chapter, the discretion permitted under current Medicare policy concerning specialized services raises complex issues about which there are a range of perspectives.

Our interviews of physicians with expertise in cancer, nephrology, palliative medicine, and hospice care (discussed in more detail later in this chapter) indicated that determinations about the benefits and risks of complex palliative services (e.g., dialysis, blood transfusions, radiation, and chemotherapy) for individual hospice patients involve substantial medical judgment. Among clinicians we interviewed, views varied on when and what types of services were palliative and appropriate for hospice patients. In addition, some interviewees indicated that some hospice clinicians may view certain complex services as inconsistent with the hospice model's focus on quality of life and less aggressive end-of-life care. Because these services are often used with life-prolonging intent outside of hospice, their use within hospice may also introduce complexities concerning when they are consistent with the hospice benefit–eligibility criteria.

Interviewees told us that decisions about offering complex palliative services may also depend on a hospice's operational capacity. Some clinicians noted that certain complex services may require frequent labs or specialized monitoring or may have potential side effects that increase the risk of hospitalization. The provision of such complex palliative services

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on the circumstance, it is not always clear whether the purpose of the service is palliative and therefore within the scope of the hospice benefit. These determinations are likely very individualized, specific to the clinical circumstances of an individual patient at a specific time in their disease progression and the medical judgment of their hospice physician. A second complexity concerns the interaction between the provision of these services and the hospice-eligibility criterion of a life expectancy of six months or less if the disease runs its normal course. If the service (e.g., dialysis or blood transfusion) is both palliative and

Medicare policy on complex palliative services in hospice: Varied viewpoints (cont.)

differs, therefore, from the traditional model of hospice care, and some interviewees stated that some providers may not have the infrastructure to support it.

Commissioners' discussions during MedPAC's 2025 and 2026 public meetings also acknowledged varied perspectives on the discretion hospices have to offer complex palliative services (Medicare Payment Advisory Commission 2026a, Medicare Payment Advisory Commission 2025a, Medicare Payment Advisory Commission 2025b). Some stated that beneficiaries should be able to expect a consistent bundle of services regardless of the hospice they choose and expressed concern that permitting hospices to decide whether to provide certain complex services that may be palliative for some patients may reduce access for patients who might benefit. On the other hand, some noted that expanding the set of services hospices are required to provide may shift the hospice model of care toward more traditional medical care, potentially lessening its emphasis on comfort, quality of life, and less-invasive care and may affect the extent to which some clinicians engage in conversations about prognosis, treatment trade-offs, and goals of care.

Requiring hospices to provide palliative dialysis, radiation, blood transfusions, and chemotherapy might pose enforcement challenges for CMS. It may be difficult to distinguish between a hospice that has failed to offer a complex service with a palliative benefit for a particular patient from a hospice that did not offer such services because they had no patients for whom the services were clinically appropriate and reasonable and necessary for palliative purposes. A similar challenge surrounds the current requirement that hospices offer all four levels of care: routine home care (RHC), general inpatient care (GIP), continuous home care (CHC), and inpatient respite care (IRC). Some hospices do not provide CHC, IRC, or GIP in a given year, despite the requirement, and it is not always clear why.

Commissioners' discussion in public meetings also touched on the issue of whether beneficiaries had adequate information about individual hospice providers' service offerings. Commissioners discussed the importance of ensuring that beneficiaries have clear information about the complex palliative services offered by individual hospice providers, and some commissioners raised the potential to enhance transparency (for example, by reporting this information on Medicare's Hospice Compare website). Currently, Medicare's Hospice Compare reports some information on whether hospices have furnished at least one other level of care in addition to RHC (i.e., whether, during a three-year reference period, a hospice furnished only the RHC level of care or furnished at least one day of at least one of the three other levels of care to any patient), but it does not report information on whether hospices offer or furnish complex palliative services. ■

life extending, the hospice physician would need to determine the service's expected effect on the patient's life expectancy and whether the patient would meet the hospice-eligibility criteria while receiving the service. A final complexity relates to the hospice model of care and variation across clinicians and hospice providers in their views of certain treatments. Hospice is intended to provide comfort and emotional support to patients near the end of life and generally lessen reliance on aggressive or invasive care. Some hospices may view treatments such as dialysis, radiation, blood transfusions, and chemotherapy as not palliative or consistent with the hospice model of care.

We reviewed the literature and interviewed clinicians, hospice providers, dialysis providers, and family caregivers to gather perspectives on the palliative role of certain complex services in hospice care. Overall, we found general consensus that dialysis, radiation, and blood transfusions can provide symptom relief for some hospice patients but less consensus around the role of chemotherapy in symptom relief for hospice patients.

Findings from the literature

The literature suggests that, for some hospice patients, there may be a palliative role for certain complex services that are often used for nonhospice patients with the goal of extending life. To date, however, we have not identified many studies that specifically evaluated the effect of dialysis, radiation, blood transfusions, and chemotherapy on symptoms in patients receiving hospice care or patients in the last months of life. The following are some of our findings from our literature review:

- ***Dialysis***—Some researchers indicate that the provision of palliative dialysis may reduce symptoms of fluid overload or uremia (e.g., shortness of breath, nausea, vomiting, poor appetite, altered mental status) and improve comfort in some patients with ESRD (Chen et al. 2019, Grubbs et al. 2014, Kalantar-Zadeh et al. 2020, Romano and Palomba 2014).[9]
- ***Radiation***—The American Society for Radiation Oncology's guidelines note that there is strong evidence supporting the use of radiation to palliate pain from bone metastases (Alcorn et al. 2024). While this guideline is not specific to the hospice population, Yerramilli and Johnstone reviewed the literature and concluded that conventional radiation therapy (generally a single fraction) can palliate pain from bone metastases and other symptoms for patients with a life expectancy of two to six months but that it is unlikely to successfully palliate most symptoms for patients with a life expectancy of less than a month (Yerramilli and Johnstone 2023).
- ***Blood transfusions***—The American Society of Hematology guidelines panel (2020) reviewed the literature on the effect of blood transfusions on symptoms and concluded that there is evidence that red blood cell transfusions improve fatigue and patient perceptions of well-being for some cancer patients receiving palliative care (Sekeres et al. 2020). They recommended, based on this evidence and a desire to facilitate timely hospice enrollment, that red blood cell transfusions be made available to adult patients with acute myeloid leukemia who cease antileukemic treatment, including those receiving hospice and end-of-life care (Sekeres et al. 2020).[10]
- ***Chemotherapy***—Studies suggest that chemotherapy use near the end of life is associated with patterns of care involving more intensive health care services, such as a greater likelihood of later referrals to hospice, emergency room visits, hospitalization, intensive care unit (ICU) stays, and death in the hospital or nonhome setting (Akhlaghi et al. 2020, Wright et al. 2014). Other studies have found that certain intensive services near the end of life—such as hospitalizations, ICU use, and hospital deaths—are associated with poorer patient quality-of-life measures (Chen et al. 2025, Zhang et al. 2012). A few studies have examined the effect of chemotherapy itself on measures of symptoms or quality of life for patients who are in the last months of life. Zhang and colleagues found that chemotherapy in the last week of life was associated with poorer patient quality of life (as reported by caregivers) (Zhang et al. 2012). Chen and colleagues focused on patient-reported end-of-life quality measures over the last six months of life and found no effect of chemotherapy use on quality of life (Chen et al. 2025). Prigerson and colleagues examined quality of life near death for patients with metastatic cancer with a life expectancy of six months or less and found that those who received chemotherapy had similar or worse quality of life than patients who did not receive chemotherapy (Prigerson et al. 2015). The American Society of Clinical Oncology sponsored a quality measure that was adopted by the National Quality Forum in 2012 and remains in use today in the Merit-based Incentive Payment System. The measure is the percentage of cancer decedents who receive chemotherapy in the last 14 days of life, with higher quality indicated by fewer patients receiving chemotherapy in the last two weeks of life (Centers for Medicare & Medicaid Services 2025d). Roeland and LeBlanc noted that some chemotherapy may reduce disease burden and symptoms and possibly extend life for select patients with advanced cancer but that chemotherapy given near death is not effective at relieving symptoms (Roeland and LeBlanc 2016).

Findings from stakeholder interviews

We conducted interviews with clinicians, hospice providers, dialysis providers, and family caregivers in 2024 and 2025. In these interviews, we focused on dialysis, radiation, blood transfusions, and chemotherapy because CMS raised questions in the hospice proposed rules for FY 2024 and FY 2025 about access to these services under the hospice benefit. The text box "Overview of stakeholder interview process," p. 205, gives additional details on our interview approach. We provide a summary of common themes related to hospice enrollees' access to all four of the complex palliative services (Table 5-1, p. 204), followed by a summary of interviewees' perspectives on specific services.

Certain complex services may serve palliative purposes for some hospice patients

The role of specialized services in hospice is complicated because the services can be life extending or palliative or both depending on the patient's stage of disease. Clinicians and relevant specialists we interviewed varied in their perspectives on whether and when they consider these services to be palliative and consistent with the hospice benefit criteria, and they explained the considerations they give to an individual patient's situation and type of service. Interviewees generally viewed dialysis, radiation, and blood transfusions as having the potential to be palliative and consistent with the hospice benefit criteria in certain circumstances for some hospice patients. There was less consensus among interviewees about the role of chemotherapy in hospice care.

Hospices that provide these services reported doing so for multiple reasons, depending on the circumstances of the individual patient

Hospice clinicians that we interviewed explained that, depending on the type of service and individual patient situation, services such as dialysis, radiation, and blood transfusions are furnished to provide symptom relief to some hospice patients. Oncologists and palliative care clinicians said that the treatments' benefits in terms of symptom relief vary across patients and by their end-of-life stage. Some patients may no longer be able to tolerate the treatment by the time they enroll in hospice. Furthermore, patients with a prognosis of only a few days to weeks may not have enough time to experience the benefits of certain palliative treatments (e.g., radiation). Interviewees said that the process of traveling to a clinic or hospital and spending several hours there receiving dialysis, radiation, or blood transfusions can be physically taxing for patients and that for those in the last few days of life, the burdens of treatment and travel on the patient can often outweigh the benefits.

Physicians and hospice providers also said they offered these services to ease beneficiaries' decisions to transition to hospice. Multiple hospice physicians stated that patients who enroll in hospice only in the last few days of life do not fully benefit from the symptom management and emotional support that hospice care can offer both the patient and their family. Interviewees indicated that dialysis- or transfusion-dependent patients, in particular, will typically die within one to two weeks after ceasing dialysis or transfusions and may be reluctant to discontinue treatment in order to enroll in hospice. Some hospices said that allowing patients who wished to enroll in hospice to continue these treatments helped to address their fear of "dying right away" and gives them the opportunity to enroll earlier than they otherwise would. A few hospice providers noted that entering hospice and having a hospice system in place at home eases beneficiary decisions to cease treatment.

Another reason hospices said they provide these services in some cases was to help patients have an end-of-life experience that is consistent with their values and goals (e.g., spending more time with family or participating in specific milestones, such as a family wedding).

High-cost services that may serve palliative purposes could be challenging for hospices to provide

Hospice providers are responsible for the cost of all services for palliation of the terminal condition and related conditions, while FFS Medicare continues to pay separately (i.e., outside of the hospice benefit) for services that are unrelated to the terminal illness. Most interviewees indicated that it is rare to consider dialysis, radiation, blood transfusion, and chemotherapy as unrelated to the patients' terminal condition, while a few said that, for patients with ESRD and certain conditions

TABLE 5–1

Perspectives on the use of dialysis, radiation, blood transfusions, and chemotherapy in hospice: Summary of findings from interviews

Themes	Interviewees' perspectives
Palliative role in hospice	• General consensus held that dialysis, radiation, and blood transfusions can provide symptom relief for some hospice patients. • Less consensus existed around the role of chemotherapy in symptom relief for hospice patients.
Potential to affect beneficiary prognosis and eligibility for hospice	• Use of radiation in hospice patients is generally only palliative. • Dialysis and blood transfusions may extend life expectancy by weeks or months for hospice-eligible beneficiaries depending on timing of hospice enrollment. • Chemotherapy may extend life expectancy depending on situation.
Hospice rationale(s) for providing service	• Reasons vary depending on type of service and individual patient situation. • Services may be provided for symptom relief. • Provision of services may ease transition to hospice, particularly for those on life-sustaining treatments. • Provision of services can help beneficiary reach specific goal (e.g., attending a family wedding, graduation).
Cost of services	• Cost of dialysis, radiation, blood transfusions, and some chemotherapy to the hospice generally exceeds Medicare's hospice daily payment rate (for RHC). • These services are likely cost prohibitive for small hospices; larger hospices are more likely to furnish these services, and these agencies are more likely to be nonprofit. • Cost of providing specialized services varies by hospice's ability to negotiate rates and execute contracts with dialysis facilities and hospitals/clinics. • Additional services can be high cost for hospices (e.g., drains for abdominal ascites or pleural effusions, ventilators for ALS patients, total parenteral nutrition, and certain drugs for symptom relief).
Transportation	• Cost of transportation, particularly ambulance if patient's condition requires one, can add significantly to the cost of providing service. • Ambulance use rates vary by type of service. • Some hospices that furnish costly services rely on patients to have access to transportation from family, caregiver, or the community.
Effect on patient decision to elect hospice	• Some patients do not enroll in hospice or enroll very near the end of life due to concern about ceasing treatment, including patients with ESRD or blood cancer who rely on dialysis or blood transfusions, respectively. • Some patients with cancer receiving radiation may delay hospice enrollment by a few days or weeks to receive additional radiation treatments before entering hospice.
Referrals from specialists	• Hospice providers reported that timely referrals to palliative care and hospice are less likely from specialists (e.g., oncologists, hematologists, nephrologists) and are more frequently from hospitals or primary care providers.
Protocol of hospices that provide these services and pay for them under the hospice benefit	• Radiation is often offered as a single treatment (sometimes up to five) to palliate pain. • Dialysis and blood transfusions are often furnished with some type of limit on number or frequency of treatment. • Chemotherapy is less commonly offered.
FFS payment of dialysis for beneficiaries with ESRD enrolled in hospice	• Views differed on whether dialysis is ever unrelated to the beneficiary's terminal condition and related conditions. • Hospices stated that CMS had tightened its guidance on relatedness such that the use of dialysis outside of the hospice benefit had become less common.

Note: RHC (routine home care), ALS (amyotrophic lateral sclerosis), ESRD (end-stage renal disease), FFS (fee-for-service). "Chemotherapy" includes both chemotherapy and immunotherapy.

Source: MedPAC analysis of interviews with clinicians, hospice and dialysis providers, and family caregivers.

Overview of stakeholder interview process

In 2024 and 2025, we conducted interviews with clinicians, hospice providers, dialysis providers, and family caregivers to better understand the current level of access that beneficiaries in hospice have to certain costly complex palliative services. Participation in our interviews was voluntary, and interviewees spoke on the condition of anonymity. Interviews included 12 nonhospice clinicians in several specialties (oncology, hematology, nephrology, and palliative care), clinicians and administrative personnel from nine hospice providers and three dialysis providers (including hospice medical directors, hospice physicians, nephrologists, nurses, social workers, and other administrative staff), and multiple family caregivers of decedents who used hospice.

To identify potential hospices for the study, we sought feedback from industry associations for hospice clinicians or administrative staff with experience or knowledge about the provision of these specialized services. To identify nonhospice clinicians and dialysis providers for the study, we relied on the literature and recommendations by clinical experts and local health care providers in areas where we conducted interviews. The providers and clinicians we interviewed varied by region, urban and rural status, ownership type, and practice setting. In these interviews, we mostly focused on four selected services—dialysis, radiation, blood transfusions, and chemotherapy—because CMS raised questions in hospice proposed rules for fiscal year (FY) 2024 and FY 2025 about access to care under the hospice benefit for these complex palliative services. Interview protocols were tailored to the interviewees' specialty and included the following topics:

- the role of a selected service for hospice patients;
- perspectives on the current level of access that beneficiaries in hospice have to selected services;
- hospices' experience with providing selected services for palliative purposes;
- types of hospice patients who benefit from the selected service and the eligibility criteria, if any, for receiving these services in hospice;
- hospices' experience in contracting with other facilities and providers to furnish selected services;
- frequency and duration of selected services provided to hospice patients;
- whether there are additional high-cost services that hospices report furnishing for palliative purposes; and
- nonhospice clinicians' experience with coordinating patient care with hospices.

Our interviews with family caregivers of decedents who used hospice included the following topics: decedent experience with electing hospice and factors considered during decision-making; change in decedent experience pre- versus post-hospice enrollment; decedent and family caregiver experience with care furnished by hospice clinicians and staff at the end of life; and decedent and family caregiver experience, if applicable, with receiving complex palliative services in hospice. ■

(e.g., certain cancers), dialysis could be considered unrelated and paid separately outside of the hospice benefit. Some interviewees said that CMS has tightened its guidance on "relatedness" over the years and that it has become less common for dialysis to be paid outside of hospice under FFS Medicare.

Interviewees told us the cost of dialysis for beneficiaries with ESRD and radiation, blood transfusions, and chemotherapy for beneficiaries with cancer generally exceeds the Medicare hospice daily payment rate. Several clinicians and hospice providers perceived that cost was a primary reason that many hospices, especially small and medium-size providers, do not offer dialysis, radiation, blood transfusions, or chemotherapy. They indicated that more hospices might provide some of these services if greater payment was available.

A few hospices reported being able to leverage their large size to absorb the cost of these services. Some also reported that the Veterans Health Administration (VHA) provides coverage for disease-directed therapies after patients enroll in hospice and that their hospice had provided these treatments in some cases for VHA patients. Interviewees indicated that the cost of these services also varies by the hospice's ability to execute contracts and negotiate rates with dialysis facilities, outpatient hospitals, and clinics.[11] Several hospices were able to negotiate prices with dialysis facilities and radiation centers such that they never paid more than the Medicare-allowable rate. Another hospice told us, however, that certain dialysis facilities refused to establish "one-time contracts" and that, without a contract in place, the hospice was charged a rate that significantly exceeded the FFS payment per dialysis treatment.

Interviewees described varied approaches that hospice providers may take toward specialized complex palliative services like dialysis and blood transfusions. One clinician noted that some hospice providers may require patients to forgo treatments such as dialysis and blood transfusions when electing hospice because they impact patients' life expectancy. Alternatively, some hospice providers may place a limit on the number or duration of treatments that patients may receive after enrolling in hospice.

Transportation can add financial and logistical challenges for hospices providing these services

Dialysis, radiation, and blood transfusions generally require patients to travel to and from from the patient's home or a facility where they reside to a dialysis facility and outpatient hospitals and clinics. Costs and logistical issues related to providing transportation were cited as further barriers to hospices providing these complex palliative services. The cost of transportation services, particularly ambulances in those situations where the patient's condition requires ambulance transport, was described as significantly higher than the cost of some of these treatments. Under Medicare ambulance coverage policy, nonurgent ambulance services are considered reasonable and necessary in certain circumstances (e.g., when the patient is bedbound and transit meets certain other requirements).[12]

Among hospices that provided dialysis, radiation, and/or blood transfusions, a few hospice representatives indicated that the hospice would cover the cost of the treatment but that patients would be responsible for their own transportation. A few hospices mentioned the availability of county- or local area–supplied transportation services and helping arrange those services for patients. For one hospice, transportation providers were simply unavailable in their service area.

Several hospice physicians cited reasons in addition to cost for why they required patients to have access to private transportation. One physician said that treatments may be delayed for patients who require transportation from third-party providers if there is limited availability of transportation services. Second, several hospice physicians said they use patients' functional status and ability to travel via private transportation without stretchers to gauge patients' ability to tolerate and benefit from the treatment. A few hospices indicated that becoming bedbound and/or requiring an ambulance for transport triggers a discussion with the patient about goals of care. For most interviewees, it was uncommon to incur the cost of the ambulance for these types of services.

Impact on patients' decision to elect hospice

Several clinicians we interviewed explained that dialysis- and transfusion-dependent patients, in particular, may be averse to ceasing these treatments to enroll in hospice. We were told that these patients had typically been receiving these treatments for a long time and had been instructed repeatedly about the importance of not missing treatment for their survival. The prospect of ceasing these treatments to elect hospice, therefore, is dissonant with the messaging they have received over the course of their treatment and may make it psychologically difficult for some patients to accept, no matter how fatigued they may already be from these treatments. In addition, several clinicians said patients receiving dialysis and transfusions regularly develop trust and relationships with the staff and clinicians who furnish these services. For some patients, these care teams become almost like family, which may make them reluctant to elect hospice and transition to a different model of care. We also heard from clinicians that sometimes families and caregivers of dialysis- and transfusion-dependent patients may be more apprehensive than the patients themselves about the idea of ceasing treatment to enroll in hospice.

Several oncologists and hospice providers explained that the timing of hospice enrollment is an additional consideration for some patients with cancer who are receiving radiation treatment. We were told that some of these patients may choose to wait to enroll in hospice for a few days or weeks until they have received additional radiation. Waiting to finish their radiation treatments before entering hospice was described as preferred by both patients and hospices. Some hospices we interviewed distinguished between radiation that patients might receive before enrolling in hospice versus radiation that might be provided during their stay for a new symptom that arises.

Interviewees reported fewer timely referrals to hospice from specialists

A few hospice providers noted that in their experience, timely referrals to palliative care and hospice (e.g., more than 48 hours before death) are less likely from specialists and that referrals to hospice for patients on dialysis and patients with cancer are more frequently from hospitals or primary care providers. These observations reflect what we heard from interviewees and are not based on quantitative analyses. One palliative care physician described nephrology as having a "very rigid model of care" centered on dialysis adequacy and making sure patients receive thrice-weekly treatments. Another hospice provider indicated that oncologists, like nephrologists, are generally focused on providing disease-directed treatments, with referrals to hospice often occurring very close to the end of life.

Several interviewees suggested that training during medical school and residency can shape specialists' inclination to consider palliative care options for their patients and their comfort levels with having end-of-life discussions with patients. These interviewees indicated that those who lack training in palliative care may associate transitioning to hospice with giving up on patients and being contrary to the ethos of medicine. They also noted that the ESRD Quality Incentive Program does not include any quality measures to incentivize nephrologists to recommend palliative care to eligible patients.

Hospices' experience with providing dialysis to enrollees with ESRD

We asked hospice providers about the role of dialysis for patients with ESRD who are receiving hospice care. Interviewees told us that dialysis is palliative for some of these patients because it can relieve discomfort from symptoms of fluid overload or uremia (e.g., shortness of breath, nausea, vomiting, poor appetite, altered mental status); there are other patients, in contrast, who can no longer tolerate the treatment by the time they enter hospice. Many interviewees noted that dialysis also extends life for these patients; without dialysis, most patients with ESRD would die within one to two weeks.

Given the life-prolonging nature of the treatment, we asked providers whether dialysis affects hospice-eligibility criteria determinations. Several respondents explained that there are certain markers of declining clinical status (e.g., difficulty maintaining blood pressure, frequent hospitalizations, recurrent anemia) and worsening comorbid conditions (e.g., heart failure, cancer) that can be used to identify patients whose lives would be extended by no more than a few weeks through dialysis. A few interviewees noted that better prognostic models are necessary to be able to identify patients who are eligible for hospice because some patients at the outset of dialysis may appear to have a six-month life expectancy but may live for years with dialysis. We were also informed that some of the existing innovative models of concurrent care for beneficiaries on dialysis have tended to focus on patients with life expectancies of less than six months.

We asked hospices whether they provided dialysis to their patients under the hospice benefit (that is, not paid for separately outside of the hospice benefit). We heard about a mix of policies and approaches by hospices that provided dialysis and how, in some cases, policies within a hospice changed over time. Several hospices allowed beneficiaries with ESRD to enroll and continue dialysis up to a specified limit: Some limited the time that patients could continue on dialysis (30 days or six to eight weeks), and others capped the number of treatments at around 10 to 12. In a few of these hospices, the treatment caps were described as an initial plan of care that could be modified or renewed. Some of the hospices with a treatment cap reported that patients often do not use the maximum allotted number or days. Only one hospice we interviewed had no prespecified limit on dialysis.

According to clinicians we interviewed, beneficiaries who received dialysis while in hospice tended to continue using the modality that they had historically used before hospice entry. In addition, we were told that it is not typical to transition a patient entering hospice from in-center hemodialysis to peritoneal dialysis (PD) due to the complexities of doing so, particularly in the last weeks of life. These complexities include the time (in weeks) that facilities require to train patients and their caregivers to safely administer dialysis in their home. In addition, it is necessary for clinicians to place a PD catheter for patients switching from hemodialysis to PD.

In addition to specifying the number or duration of dialysis treatments offered after entering hospice, some hospices also reduced the intensity or frequency of dialysis in consultation with the medical director and nephrologist (e.g., by dropping from three to two treatments per week or changing prescriptions), while others maintained the standard treatment regimen.[13] Clinicians' perspectives differed about whether modifications were warranted given the diminished benefits, as well as additional burden to patients at the end of life, of certain lab tests and ESRD medications and even of a third treatment on a given week.

Hospices' experience with providing radiation to enrollees with cancer

We asked hospice and nonhospice clinicians about their views on the role of radiation in hospice care. Physicians described radiation as palliative for hospice patients experiencing pain from bone or other metastases. There was general consensus that indications for radiation treatment are clearer for hospice patients than those for blood transfusions or chemotherapy because radiation for hospice patients does not generally impact prognosis or longevity. Most clinicians indicated that one to two fractions of radiation would be sufficient to relieve pain for most hospice patients, while other clinicians suggested up to five fractions may be necessary for certain patients in hospice or that some radiation oncologists preferred protocols that involved more than a single fraction. We were also told that it takes time for radiation to provide symptom relief for pain and that palliative radiation is typically used by hospice patients who have a somewhat longer life expectancy (e.g., months) and generally not for those in the last few days or weeks of life.

Several hospice providers told us the cost of radiation was lower than the cost of dialysis, blood transfusions, or chemotherapy, but not all interviewees commented on the relative costliness of each service. A few interviewees described radiation as cost prohibitive for their hospice.[14] Most hospice representatives we interviewed indicated that they furnished one to five fractions of radiation for pain management. Some interviewees said that they start with a week of radiation, regardless of treatment frequency, as an initial plan of care, while others reported that their patients typically elect to stop treatment after getting one to two fractions of radiation while in hospice. Several hospices mentioned working closely with oncologists and relying on their expertise to determine the appropriate treatment regimen for patients.

Hospices' experience with providing blood transfusions to enrollees with cancer

Oncologists, hematologists, and hospice and palliative care clinicians that we interviewed told us that blood transfusions can serve multiple purposes for hospice patients. For some patients with blood cancer who are near the end of life, transfusions can be palliative, helping to relieve symptoms such as fatigue, anemia, and shortness of breath. Physicians told us that the effectiveness of blood transfusions for symptom relief varies across patients depending on the type and stage of the disease process. For some patients, a transfusion may provide effective symptom relief for one or more weeks, whereas for other patients a transfusion may have minimal effects on symptoms or the benefits may dissipate quickly (e.g., last a few days or less). In addition, physicians we interviewed said that blood transfusions prolong life for hospice patients with blood cancer. Physicians described the effect of blood transfusions on life expectancy for hospice-eligible patients as generally modest, with some characterizing the effect as extending life for a few weeks or a few months. Several hospices shared that they provide blood transfusions in cases where patients had specific goals to reach.

Most hospices we interviewed indicated that they furnished blood transfusions—generally red blood cells—under the hospice benefit in certain circumstances. Several said that they used a criterion for the frequency of furnishing blood transfusions (e.g., ranging from once per week to once per month).[15] Other hospices said that they would admit patients who wished to receive blood transfusions with the understanding that the hospice would provide a specified number of transfusions. Interviewees whose hospices furnished blood transfusions noted that they typically did not furnish platelets due to cost and clinical complexity.

Hospices' experience with providing chemotherapy to enrollees with cancer

We asked hospice and nonhospice physicians about their views on the role of chemotherapy in hospice care. Most hospice clinicians said that in their experience chemotherapy was not provided in hospice care or that it was extremely rare. These hospice clinicians indicated that they did not generally view chemotherapy as palliative for hospice patients, noting that chemotherapy typically made patients feel worse near the end of life. A few hospice clinicians noted that some high-cost immunotherapies or targeted cancer drugs furnished orally have fewer side effects, and they had varied views on whether such products could serve a palliative role for hospice patients. Several hospice interviewees also told us that the purpose of chemotherapy in hospice was more to help patients come to terms with ceasing cancer treatment than to relieve physical symptoms.

Oncologists and hematologists (referred to hereafter as "cancer clinicians") we interviewed mostly viewed chemotherapy as not beneficial for hospice patients, but opinions varied. Some cancer clinicians believed that chemotherapy would not provide symptom relief for patients near the end of life. In addition, they noted that patients receiving active cancer treatment often need labs and frequent monitoring and are at risk of hospitalization from complications, and they did not perceive hospices as having the infrastructure for that type of care. Others viewed active cancer treatment as generally inappropriate for patients receiving hospice care but said that there were likely some exceptions in which an individual patient, given their unique clinical circumstances, may get symptom relief from chemotherapy. In addition, some cancer clinicians felt that low-toxicity treatments such as targeted therapies or monoclonal antibodies could help relieve symptoms for some hospice patients, but they noted that currently little literature exists about the effects of these types of products on symptoms and quality of life.

A few hospice interviewees said they do furnish chemotherapy. One hospice stated that it provided oral chemotherapy drugs on a case-by-case basis, noting that products are often too costly, but they do furnish some chemotherapy products if an oncologist determines that it will make a difference for the patient's care. Another hospice shared that when they have provided chemotherapy, it has generally been only a few treatments to help ease the emotional decision to cease active treatment and transition to end-of-life care. One hospice indicated that though they furnished chemotherapy exclusively to VHA hospice patients, these patients also often cease chemotherapy if it is not helpful. A few hospices that did not furnish chemotherapy said that sometimes patients would receive chemotherapy while on hospice because they might finish remaining doses of an existing oral prescription that they had received before hospice enrollment or that they might receive drugs through a pharmaceutical company program.

Other complex services that may be palliative for hospice patients

We asked hospice and nonhospice clinicians if there are any other high-cost treatments and services that can palliate symptoms for hospice patients. They mentioned four types. First, clinicians explained that hospice patients with fluid buildup from abdominal ascites or pleural effusions can benefit from drains. One hospice said that it becomes more financially feasible to provide paracentesis or thoracentesis when patients get permanent drains placed before coming into hospice; another provider reported that they do not admit patients who do not already have permanent drains for ascites. Second, amyotrophic lateral sclerosis, or ALS, patients rely on ventilators for breathing support. However, because they are a higher-

TABLE 5–2

Few hospices reported costs for palliative radiation or chemotherapy on the hospice cost report, 2023

	Share of freestanding hospice providers that reported costs for:	
	Palliative radiation	Palliative chemotherapy
All freestanding hospices	3%	1%
Hospice provider size		
Smallest quartile	<1	<1
Second quartile	1	<1
Third quartile	3	<1
Largest quartile	7	2
Ownership		
Nonprofit	9	4
For profit	2	<1

Note: Percentages are calculated by taking the number of freestanding hospice providers that report positive costs in the listed category divided by the total number of freestanding hospices that submitted a cost report in 2023. Hospice provider size is calculated based on the number of days of hospice care furnished to Medicare beneficiaries in 2023. It is unknown whether all providers accurately report costs in these fields because cost-report data are not used for payment and are not audited. It is also unknown whether some hospice providers report costs for these services in other categories (such as the outpatient services category).

Source: MedPAC analysis of Medicare cost reports and hospice claims data.

cost type of durable medical equipment, ventilators were described as too expensive for many hospices. Third, some patients require feeding through total parenteral nutrition, or TPN. Similar to hospice-eligible patients with ESRD on dialysis, those on TPN may live for a few weeks to months with TPN versus a few days to weeks without it. However, at least three hospices noted it was not financially feasible to provide TPN due to high cost. Furthermore, one hospice provider explained that to provide TPN safely requires a high level of monitoring, "beyond the scope of hospice." A few clinicians noted that hospices may disallow TPN, provide "TPN-Lite" (e.g., modified TPN without lipids), or provide TPN for a short period, with weekly reassessments of the need for treatment. Finally, some physicians mentioned that there are certain drugs that may palliate symptoms for some hospice patients but are generally too costly for hospices, such as certain drugs for heart failure and other cardiovascular conditions (e.g., certain inotropes).

Limited data available on whether hospices furnish certain complex palliative services

Medicare generally lacks data on how frequently hospice providers furnish services like dialysis, radiation, blood transfusions, and chemotherapy. Medicare hospice claims data do not include information about when hospice providers furnish these services.[16] Without such data, policymakers are very limited in their ability to understand the extent to which hospice providers currently furnish these services.

The only claims data available on hospice enrollees' use of high-cost services are for those services paid for outside of the hospice benefit. FFS Medicare pays for these services outside of hospice when they are reported to be unrelated to the terminal condition. In subsequent sections of this chapter, we discuss the frequency of such services provided outside the hospice benefit, but it is important to keep in mind that these data do not give us any information about whether or how often hospice providers furnish these services under the hospice benefit.

The Medicare hospice cost report includes limited data on costs incurred by hospices for some services: Palliative radiation and palliative chemotherapy are included but not dialysis or blood transfusions. However, we note several caveats with the cost-report data. It is unknown whether providers accurately report data in the radiation and chemotherapy spending categories. For example, because payment is not dependent on reporting costs for these services, it is possible there could be underreporting. It is also unknown whether some hospice providers report costs for these services in other categories (such as the outpatient services category) rather than in the more specific categories.

In 2023, about 3 percent of freestanding hospices reported incurring costs for palliative radiation, and about 1 percent reported incurring costs for palliative chemotherapy (Table 5-2). These amounts represent a small decrease from 2019, when 5 percent of freestanding hospices reported palliative radiation costs and 2 percent reported palliative chemotherapy costs (data not shown). Larger hospices and hospices with nonprofit ownership were more likely to report costs for palliative radiation and chemotherapy than other hospices (Table 5-2). Overall, total costs (across all patients) reported by freestanding providers for these services were very small in 2023: $1.2 million for palliative radiation and $0.5 million for palliative chemotherapy (data not shown).

Other researchers' analyses of cost-report data for earlier time periods also indicate that the share of hospices reporting radiation and chemotherapy costs on their cost reports has declined over time. Jarosek and colleagues found that 22 percent of freestanding hospices reported radiation costs in 2002 (Jarosek et al. 2009). According to Hsu and Wang, the share of freestanding hospices reporting costs for radiation declined from about 13 percent in 2011 to 5 percent in 2018; for chemotherapy, the figure declined from 5 percent in 2011 to 3 percent in 2018 (Hsu and Wang 2020). Both studies noted that nonprofit providers were more likely to report radiation costs than for-profit providers. The rapid growth in the number of for-profit hospice providers over the last two decades may account for some of the decline observed in the overall share of providers reporting radiation costs. However, according to Hsu and Wang, the share of nonprofit hospices reporting radiation costs also declined between 2011 and 2018 (Hsu and Wang 2020).

Finally, a survey by Knight and colleagues of a 10 percent random sample of hospice providers found that a majority (55 percent) of hospice survey respondents reported never offering blood transfusions in 2022, while 41 percent reported "sometimes," and 3 percent reported "always" offering blood transfusions. Larger and nonprofit hospices were more likely to report offering blood transfusions than other hospices. The most common "somewhat" or "extremely" contributing factors cited by hospices for never or only sometimes offering blood transfusions were the hospice organization's belief that transfusions are not consistent with the philosophy of hospice (75 percent), cost (65 percent), and transportation barriers (59 percent) (Knight et al. 2024).

Use of hospice by beneficiaries with ESRD or cancer

We analyzed FFS claims data pertaining to use of hospice services and certain complex services (dialysis, radiation, and blood transfusions) by beneficiaries with ESRD receiving maintenance dialysis and beneficiaries with cancer. This analysis examines the rate of enrollment in hospice by decedents with ESRD who received maintenance dialysis from a dialysis facility in their last year of life (or for selected analyses based on a longer look-back period) and beneficiaries with cancer, as well as the use of dialysis by hospice enrollees with ESRD and the use of radiation and blood transfusions by hospice enrollees with cancer, when those services are covered outside of the hospice benefit. We mostly focused on 2019, the last year before the coronavirus pandemic.[17] We found that Medicare decedents with ESRD are substantially less likely to use hospice and those who do have much shorter stays than other Medicare decedents. Decedents with cancer are

TABLE 5–3

Lower hospice use among Medicare decedents with ESRD than among Medicare decedents overall

	All Medicare decedents	Decedents with ESRD
Share of decedents who used hospice, by year		
2010	44%	27%
2019	52	30
2024	53	31
LOS among hospice decedents, 2024		
Average	100 days	24 days
10th percentile	2	2
50th percentile	19	6
90th percentile	291	41
Share of decedents with hospice, by LOS, 2024		
≤3 days	17%	33%
4–7 days	15	27
8–14 days	13	18
≥15 days	55	22

Note: ESRD (end-stage renal disease), LOS (length of stay). For beneficiaries with ESRD, data are limited to those beneficiaries who received dialysis at some time during the last calendar year of life.

Source: MedPAC analysis of Medicare hospice claims and enrollment files from CMS.

more likely to use hospice but have shorter hospice stays compared with other Medicare decedents. Beneficiaries with blood cancer, particularly those who are transfusion dependent, have shorter stays than beneficiaries with other cancers.

Though we are unable to know how frequently hospices furnish dialysis, blood transfusions, and radiation under the hospice benefit due to data limitations, we can assess hospice agencies' provision of drugs, including chemotherapy, using claims data from 2017, the last full year hospices were required to report drug data on Medicare claims. Here we found that hospices furnished drugs such as analgesics, central nervous system agents, and gastrointestinal agents to a majority of their enrollees with cancer in 2017, but few of these enrollees received antineoplastics (chemotherapy) from their hospice providers.

Last, we reviewed the literature on various models of concurrent care for patients on dialysis and patients with cancer—both within and outside of the Medicare program—to understand more about the scope of the various models and researchers' evaluations of their effects (where available).[18]

Hospice use remains lower for Medicare decedents with ESRD than for all Medicare decedents

According to the Commission's analysis, hospice use among Medicare decedents with ESRD lags behind hospice enrollment for all Medicare decedents. In 2024, 31 percent of decedents with ESRD received hospice services compared with 53 percent of all Medicare decedents (Table 5-3). Hospice use among decedents with ESRD has grown since 2010, but the pace of that growth has been slower than the pace for all Medicare decedents. Between 2010 and 2024, hospice use grew by 4 percentage points among decedents with ESRD but 9 percentage points among all Medicare decedents (Table 5-3).

Similar to all Medicare decedents, hospice use among decedents with ESRD:

- varies geographically (with rates ranging from 12 percent to 53 percent across the 50 states and the District of Columbia in 2024);
- is generally higher in states where rates of hospice use for the overall decedent population are higher; and
- is higher for beneficiaries who are older, White, and not dually eligible for Medicare and Medicaid than for other beneficiaries.

Hospice lifetime length of stay among decedents with ESRD is lower compared with decedents overall (Table 5-3). In 2024, the average lifetime length of stay was 24 days for decedents with ESRD compared with 100 days for Medicare decedents overall, and the median hospice length of stay was 6 days for decedents with ESRD compared with 19 days for Medicare decedents overall.

In 2024, unlike the overall Medicare decedent population, rates of hospice use among decedents with ESRD varied little by rural and urban status; among all Medicare decedents, hospice use is lower for those in rural areas than in urban areas (Medicare Payment Advisory Commission 2026b). Decedent hospice users with ESRD were more likely to have their hospice stay preceded by a hospitalization than decedent hospice users with other terminal conditions (64 percent vs. 49 percent of hospice users, respectively, based on prepandemic data). Our finding that hospice use is lower for Medicare decedents with ESRD compared with all decedents is consistent with other researchers' findings.[19]

Hospice use rates vary by ESRD decedent characteristics

In 2019, there were a total of 2.37 million FFS Medicare decedents. Approximately 1.25 million of these decedents were continuously enrolled in Medicare Part A and Part B during the last 24 months of life, of whom 4 percent (53,391) were FFS Medicare decedents with ESRD who were on dialysis. Roughly a third (or 16,665) of decedents with ESRD elected hospice. Compared with FFS Medicare decedents with ESRD who did not elect hospice, a greater share of those who used hospice were older (36 percent were over age 80 vs. 21 percent), White (65 percent vs. 49 percent), newer to dialysis (41 percent vs. 31 percent initiated dialysis between 2017 and 2019), and had Alzheimer's disease (54 percent vs. 39 percent) (Figure 5-1, p. 214). Relative to decedents with ESRD who did not elect hospice, a smaller share of decedents with ESRD who elected hospice had full (31 percent vs. 36 percent) or partial (6 percent vs. 9 percent) dual eligibility. Decedents with ESRD who elected hospice were on dialysis for approximately 4.3 years before death, compared with 5.1 years for those who did not elect hospice. About three-fifths of decedents with ESRD who did not use hospice died in the hospital (data not shown). In contrast, the last location of care as reported by the hospice for decedents with ESRD who used hospice was the hospital for 15 percent of decedents and an inpatient hospice facility for 20 percent of decedents. Other researchers have reported similar findings with respect to site of death (Wachterman et al. 2018).

Factors that may influence enrollment in hospice for beneficiaries with ESRD

For beneficiaries with ESRD, hospice offers a different model of care from maintenance dialysis. As with other patients with chronic diseases, hospice care offers beneficiaries with ESRD who wish to enroll:

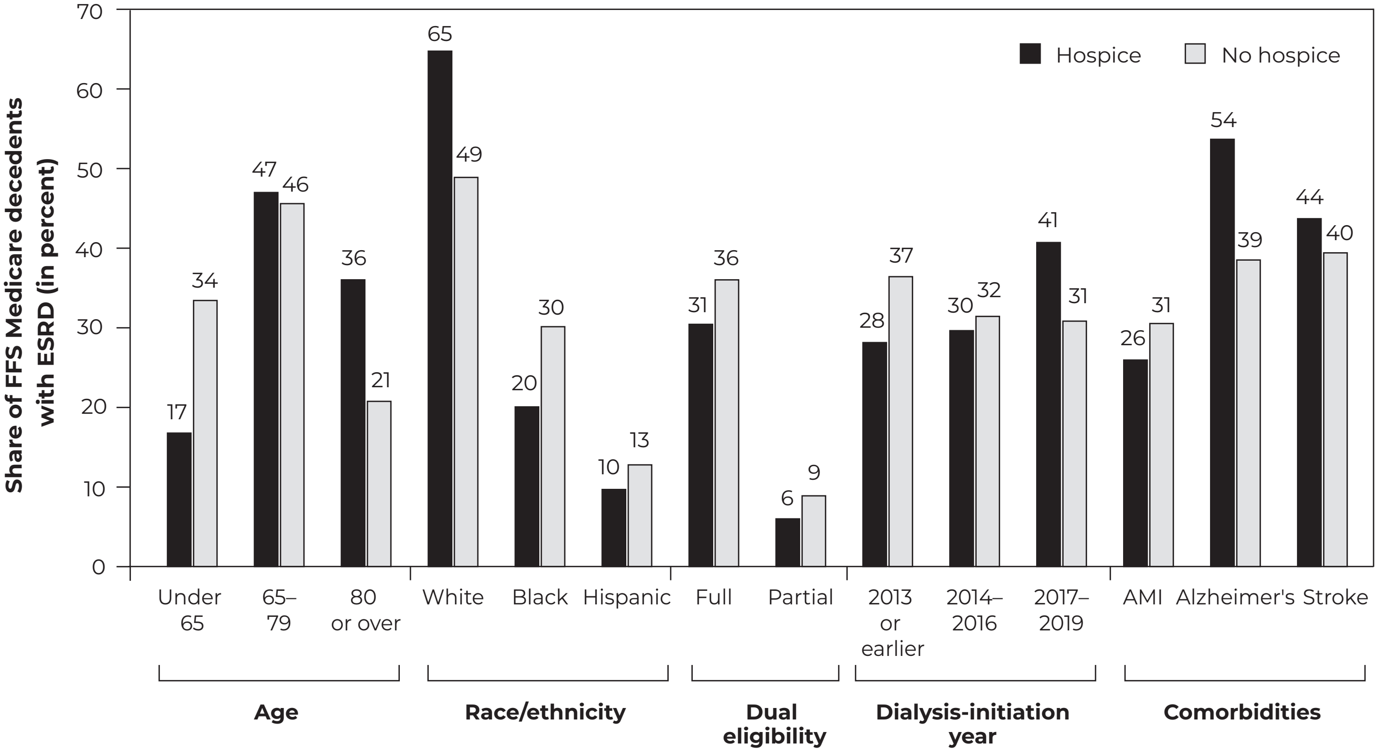
- physical, emotional, and psychological pain and symptom management;
- less aggressive care at the end of life;
- greater choice over site of care at the end of life; and
- caregiver support.

As with hospice patients in general, patients with ESRD may wish to access the palliative services that hospice offers to help minimize physical and emotional symptoms during their end-of-life stage, depending on their personal and family preferences.[20]

The literature suggests that several factors may influence decisions about hospice enrollment for beneficiaries with ESRD. Although most patients on maintenance dialysis are treated in a dialysis facility and thus have access to providers trained in nephrology thrice weekly, some researchers have

FIGURE 5–1

A greater share of FFS Medicare decedents with ESRD who used hospice were older, White, not dually eligible, newer to dialysis, or had Alzheimer's disease, 2019



Note: FFS (fee-for-service), ESRD (end-stage renal disease), AMI (acute myocardial infarction). Comorbidity indicators are based on the Medicare Beneficiary Summary File.

Source: Acumen analysis of Part A and Part B claims, Medicare enrollment data, and data from the ESRD Quality Reporting System for MedPAC.

noted limitations in some nephrology providers' end-of-life training, including for palliative care (Culp et al. 2016). Specifically, some research shows that low hospice enrollment may be due in part to a lack of training or experience among nephrologists with advance care planning and the hospice model of care (Adenwalla et al. 2024, O'Hare et al. 2018, Wachterman et al. 2024). A survey of patients on dialysis conducted by the U.S. Renal Data System (USRDS) indicates that some patients may not be having discussions with their health care providers and family members about their preferences for care, including end-of-life care (United States Renal Data System 2020).[21] In addition, a number of researchers have pointed to a lack of access to dialysis in hospice and patients' reluctance to withdraw from dialysis upon hospice election as factors contributing to lower hospice use among decedents with ESRD (Ernecoff and Anhang Price 2023, Forlini and Goldberg 2014, O'Hare et al. 2018, Schell and Johnson 2021, Wachterman et al. 2018).

Another factor that may influence referrals to and use of hospice among beneficiaries with ESRD is clinician determinations about a beneficiary's prognosis, eligibility for hospice, and whether the beneficiary could potentially benefit from hospice care. Below, we discuss how providers—clinicians and ESRD facilities—become aware that patients with ESRD on dialysis are unstable and may be approaching their end of life.

The patients' terminal illness, comorbidities, and disease progression, including functional decline and frequency of hospitalization, play a role in clinicians' consideration of prognosis and potential discussions of palliative care and hospice with their patients. Clinician organizations such as the Renal Physicians Association and the American Association of Nephrology have developed clinical practice guidelines about the appropriate initiation and withdrawal of dialysis and the use of shared decision-making with their patients. Guidelines include providing information to patients with advanced kidney injury, Stage 5 chronic kidney disease (CKD), or ESRD about their diagnosis, prognosis, and all treatment options (including conservative treatment), and instituting advance care planning (Moss 2001, Renal Physicians Association 2010). The Renal Physicians Association also has developed an advance care–planning tool that they recommend clinicians use within the first 90 days of providing care and review annually or more frequently, particularly if a change in patient status occurs (Renal Physicians Association 2010).

In addition to clinical guidelines, researchers and clinicians have developed a number of prognostic tools over the past two decades to estimate 6-, 12-, and 18-month survival for patients with ESRD on dialysis.[22] These tools aim to assist clinicians in better meeting patients' needs and preferences and to help clinicians interact more productively with patients and their families about a patient's prognosis. For example:

- Moss et al. (2008) reported that clinicians' response to "Would I be surprised if this patient died in the next year?" (known as the "surprise question") was effective in identifying a subgroup of patients on dialysis who were significantly sicker than the majority of patients on dialysis (Moss et al. 2008).[23]
- Couchoud et al. (2009) developed a prognostic score for predicting early death (six months) in elderly patients with ESRD based on the following nine factors: body mass index, diabetes, congestive heart failure Stage 3 to Stage 4, peripheral vascular disease Stage 3 to Stage 4, dysrhythmia, active malignancy, severe behavioral disorder, total dependency for transfers, and unplanned dialysis (Couchoud et al. 2009).
- Cohen et al. (2010) developed a prognostic model that used clinical information from patients' medical records and nephrologists' responses to the surprise question (Cohen et al. 2010). In a Cox multivariate analysis of the derivation cohort, the researchers reported that the following variables were independently associated with patient mortality: older age, dementia, peripheral vascular disease, decreased albumin, and a "no" response to the surprise question.[24]
- An online model by Fadem and Fadem that is based on Cohen et al. (2010) requires users to enter information concerning the patient's age, serum albumin level, and presence or absence of dementia and peripheral vascular disease and to respond to the surprise question (Fadem and Fadem 2024).

However, according to some researchers and clinicians, even with the ability of these tools to predict mortality in the dialysis population, estimating life expectancy in individual patients continues to be challenging (O'Hare et al. 2019).

In addition to these prognostic tools, Medicare's conditions of coverage for ESRD facilities require that facilities have an interdisciplinary team conduct a patient plan of care at least annually and more frequently—at least monthly—for unstable patients exhibiting clinical changes such as (1) extended or frequent hospitalizations, (2) marked deterioration in health status, (3) significant change in psychosocial needs, or (4) concurrent poor nutritional status, unmanaged anemia, and inadequate dialysis.

Use of hospital care during the last week of life was lower for decedents with ESRD who used hospice versus those who did not

We examined whether and how Medicare decedents with ESRD who ultimately did versus did not elect hospice in 2019 differed in their use of certain types of health care before death in the last year of life.[25] According to our analysis, similar shares of Medicare decedents with ESRD who did versus did not elect hospice in 2019 had short-stay hospitalizations in the last 360 days, 90 days, and 30 days of life (Table 5-4, p. 216). However, in the last seven days of life, a substantially smaller share of decedents with ESRD who elected hospice had a short-stay hospitalization (45 percent) compared with those who did not elect hospice (63 percent). Skilled nursing facility and home health use rates were higher among decedents with ESRD who elected hospice than those who did not in

TABLE 5–4

Use of certain types of health care during the last year of life among decedents with ESRD, based on hospice enrollment, 2019

	FFS Medicare decedents with ESRD who:	
	Elected hospice (*n* = 16,665)	**Did not elect hospice (*n* = 36,726)**
Percentage admitted to short-stay hospital		
Last 360 days of life	95%	92%
Last 90 days of life	85	83
Last 30 days of life	71	74
Last 7 days of life	45	63
Percentage admitted to SNF		
Last 360 days of life	52	41
Last 90 days of life	38	29
Last 30 days of life	27	22
Last 7 days of life	9	14
Percentage using home health		
Last 360 days of life	60	50
Last 90 days of life	40	33
Last 30 days of life	27	23
Last 7 days of life	11	15
Percentage using ICU		
Last 360 days of life	69	74
Last 90 days of life	54	62
Last 30 days of life	37	49
Last 7 days of life	8	24

Note: ESRD (end-stage renal disease), FFS (fee-for-service), SNF (skilled nursing facility), ICU (intensive care unit). For those who elected hospice, the use measures reflect the beneficiary's last year of life in which use may have occurred either before hospice enrollment or during hospice enrollment.

Source: Acumen analysis of Part A and Part B claims, Medicare enrollment data, and data from the ESRD Quality Reporting System for MedPAC.

the last 360, 90, and 30 days of life, but the opposite was true in the last 7 days of life. Finally, intensive care unit use was lower throughout the last 360 days of life, on average, among decedents with ESRD who elected hospice versus those who did not. In addition to hospice enrollment, several factors may affect differences in the use of certain types of health care before death, such as demographic characteristics (hospice users are on average older than those who do not elect hospice) and beneficiaries' preferences for care.

Dialysis paid for outside of the hospice benefit while beneficiaries were enrolled in hospice

Among the 16,665 decedents with ESRD who elected hospice in 2019, approximately 12 percent (or 2,076 total) received dialysis that was paid for outside of the hospice benefit during their hospice stay.[26] These 2,076 decedents had, on average, 1.3 hospice stays across a median of 33 hospice days and received a median of nine dialysis treatments paid for outside of the hospice benefit, compared with an average of 1.0 hospice stay

TABLE 5–5

A greater share of decedents with ESRD received dialysis paid for outside of the hospice benefit in freestanding, for-profit hospice agencies, 2019

	Share of hospice providers' Medicare patients with ESRD	Share of decedents with ESRD who received dialysis paid for outside of the hospice benefit while enrolled in hospice
All hospices	1.8%	12%
Hospice provider size, by quartile		
Smallest quartile	1.7	13
Second quartile	1.8	15
Third quartile	1.8	13
Largest quartile	1.8	12
Provider ownership		
Nonprofit	1.8	9
For profit	1.7	17
Government	1.7	3
Type of hospice		
Freestanding	1.8	14
HHA	1.7	8
Hospital	1.9	7

Note: ESRD (end-stage renal disease), HHA (home health agency). "Share of hospice providers' Medicare patients with ESRD" includes beneficiaries with fee-for-service (FFS) Medicare or Medicare Advantage. "Share of decedents with ESRD who received dialysis paid for outside of the hospice benefit while enrolled in hospice includes only FFS beneficiaries.

Source: MedPAC analysis of Acumen data files on use of hospice by Medicare beneficiaries with ESRD.

across a median of 5 hospice days among the 14,589 decedents who did not receive dialysis paid for outside of the hospice benefit. When analyzing the number of dialysis treatments and days in hospice, we observe a right-skewed distribution, with the 75th percentile equal to 85 hospice days and 29 dialysis treatments.

There are differences in the terminal conditions of those who did versus did not receive dialysis paid for outside of the hospice benefit during their hospice stay in 2019. The top three terminal conditions of the 2,076 decedents with ESRD under hospice care who received dialysis paid for outside of the hospice benefit were cancer (29 percent), heart conditions (24 percent), and renal disease (11 percent), while the top three terminal conditions of 14,589 decedents under hospice care who did not receive dialysis paid for outside of the hospice benefit were renal disease (72 percent), cancer (8 percent), and heart conditions (6 percent).[27]

Characteristics of hospice agencies who care for decedents with ESRD

Beneficiaries with ESRD accounted for about 1.8 percent of all hospice patients in 2019, and the share of patients with ESRD varied little by hospice characteristic (e.g., hospice size, type of ownership, and freestanding vs. provider-based hospice) (Table 5-5).

However, the prevalence of dialysis paid for outside of the hospice benefit for beneficiaries with ESRD did vary by hospice characteristic. The share of hospice decedents with ESRD who received dialysis paid for outside of the hospice benefit while enrolled in hospice in 2019 was higher in for-profit hospices (17 percent) than nonprofit hospices (9 percent) and government hospices (3 percent) (Table 5-5). The prevalence of dialysis paid for outside of the hospice benefit was also more common among freestanding hospices

TABLE 5–6

Hospice decedents with blood cancer had shorter stays in hospice than those with other cancers, 2019

	FFS decedents with:		
	Blood cancer	Other cancers	Without cancer
Share of decedents who used hospice	57%	66%	45%
Among hospice decedents, lifetime length of stay (in days)			
Average	41	53	114
10th percentile	2	2	2
50th percentile	9	16	20
90th percentile	101	132	346

Note: FFS (fee-for-service). We define "decedents with cancer" as those with a primary diagnosis of cancer on a claim for inpatient or outpatient hospital services, physician services, or hospice services in the last year of life. We define "decedents with blood cancer" as those with leukemia, multiple myeloma, or myelodysplastic syndrome. Analysis includes only FFS beneficiaries who died in 2019 and were not in Medicare Advantage in 2018 and 2019.

Source: MedPAC analysis of Medicare hospital inpatient, outpatient, physician, and hospice claims and Common Medicare Environment data.

(14 percent) than provider-based hospices. The share of hospice decedents with ESRD receiving dialysis paid for outside of the hospice benefit varied little by provider size. As noted previously, these data about the provision of dialysis paid for outside of the hospice benefit cannot tell us whether hospice enrollees are receiving dialysis under the hospice benefit.

Hospice use is higher, but also shorter, for Medicare decedents with cancer than for all other Medicare decedents

We analyzed data on the use of hospice by beneficiaries with cancer, focusing on beneficiaries with blood cancer (who may rely on blood transfusions) compared with beneficiaries with other cancers and those without cancer.[28] We found that decedents with cancer are more likely to use hospice but have shorter stays than decedents with other terminal illnesses. Among decedents with cancer, those with blood cancer tend to have lower rates of hospice use and shorter hospice stays than decedents with other cancers. In 2019, a greater share of decedents with cancer—both blood cancer (57 percent) and other cancers (66 percent)—used hospice than decedents without cancer (45 percent) (Table 5-6).

Hospice lifetime length of stay for decedents with cancer was shorter than for decedents with other terminal diagnoses (median 20 days). Among decedents with cancer, those with blood cancer had shorter stays (median of 9 days) than those with other types of cancer (median of 16 days). The average length of stay was 41 days for blood-cancer decedents, 53 days for other cancer decedents, and 114 days for noncancer decedents, reflecting differences in length of stay for the longest stays (e.g., at the 90th percentile) (Table 5-6).

Some researchers' surveys of hospices and oncologists indicate that several factors may contribute to lower hospice use among beneficiaries with blood cancer, including access to transfusions. Knight and colleagues (2024) interviewed hospice providers about their perceptions of factors that contribute to lower hospice enrollment of patients with blood cancer. The most frequently cited factors were oncologists' late referrals to hospice (89 percent) or low rates of referral to hospice (79 percent), misconceptions by patients and oncologists about hospice (87 percent and 74 percent, respectively), lack of access

TABLE 5–7

Hospice decedents with cancer who were transfusion dependent had shorter stays in hospice than those with cancer who were not transfusion dependent, 2019

	FFS decedents with:			
	Blood cancer		Other cancers	
	Transfusion dependent	Not transfusion dependent	Transfusion dependent	Not transfusion dependent
Share of decedents who used hospice	60%	57%	60%	66%
Among hospice decedents, lifetime length of stay (in days)				
Average	17	44	22	53
10th percentile	2	2	2	2
50th percentile	7	10	9	16
90th percentile	37	112	55	133
Number of decedents	5,309	40,252	4,185	349,069
Share of decedents with cancer type, by transfusion status	12%	88%	1%	99%

Note: FFS (fee-for-service). We define "decedents with cancer" as those with a primary diagnosis of cancer on a claim for inpatient or outpatient hospital services, physician services, or hospice services in the last year of life. We define "decedents with blood cancer" as those with leukemia, multiple myeloma, or myelodysplastic syndrome. We define "transfusion dependent" as those receiving at least two red blood cell transfusions in an outpatient or inpatient setting at least 5 days apart in the last 30 days of life or in the 30 days before hospice admission (similar to definition in LeBlanc et al. (2018)). Analysis includes only FFS beneficiaries who died in 2019 and were not in Medicare Advantage in 2018 and 2019.

Source: MedPAC analysis of Medicare hospital inpatient, outpatient, physician, and hospice claims and Common Medicare Environment data.

to transfusions (74 percent), and concern about bleeding risk or managing bleeding in hospice (over 50 percent) (Knight et al. 2024). Odejide and colleagues (2016) conducted a survey of 349 oncologists in 2015 about their perceptions of hospice for blood-cancer patients. Overall, 62 percent of oncologists "agreed" or "strongly agreed" that they would refer more patients to hospice if patients could have red blood cell and/or platelet transfusions in hospice. Specifically, 61 percent reported that they would refer more patients to hospice if red blood cell transfusions were offered, and 46 percent would refer more patients if platelet transfusions were offered. Other factors also affected hospice referrals: 46 percent "agreed" or "strongly agreed" that home hospice is not an adequate level of care for some of their patients' needs, and 27 percent "agreed" or "strongly agreed" that they would refer more patients if they could continue to have regular clinic visits after hospice begins (Odejide et al. 2016).

To explore whether transfusion dependence affects hospice utilization patterns among decedents with cancer, we constructed a measure of dependence on red blood cell transfusion.[29] Following an approach similar to LeBlanc and colleagues, we identified an individual as transfusion dependent if they received at least two transfusions of red blood cells in an outpatient or inpatient setting at least 5 days apart in the last 30 days of life or in the 30 days before hospice enrollment (LeBlanc et al. 2018). Among FFS decedents

TABLE 5–8

Hospice use varied more by age and race among decedents with blood cancer and those without cancer than among decedents with other cancers, 2019

	Share of FFS decedents who used hospice, 2019		
	Decedents with blood cancer	Decedents with other cancers	Decedents without cancer
All	57%	66%	45%
Age			
<65	40	60	19
65–79	52	64	32
80+	64	71	57
Sex			
Male	55	63	38
Female	61	70	51
Race/ethnicity			
White	59	68	47
Black	47	58	32
Hispanic	48	62	30
Asian	43	59	30
Dual eligibility			
Full or partial	51	63	44
None	58	67	45

Note: FFS (fee-for-service). We define "decedents with blood cancer" as those with a primary diagnosis of leukemia, multiple myeloma, or myelodysplastic syndrome in the last year of life. We define "decedents with cancer" as those with a primary diagnosis of cancer on a claim for inpatient or outpatient hospital services, physician services, or hospice services in the last year of life. Analysis includes only FFS beneficiaries who died in 2019 and were not in Medicare Advantage in 2018 and 2019.

Source: MedPAC analysis of Medicare hospice claims and Common Medicare Environment data.

with blood cancer in 2019, about 12 percent met the criteria for transfusion dependence. Decedents with blood cancer who were transfusion dependent were slightly more likely to enroll in hospice than those who were not (60 percent vs. 57 percent), but they had shorter hospice stays (median of 7 days vs. 10 days; average of 17 days vs. 44 days) (Table 5-7, p. 219).

These results are directionally similar to LeBlanc and colleagues' (2018) analysis of data for individuals with leukemia from 2006 to 2011, which found a greater likelihood of hospice use but shorter hospice stays among those who were transfusion dependent than among those who were not. We also examined transfusion dependence among decedents with types of cancer other than blood cancer. Only about 1 percent of decedents with other cancers were transfusion dependent, and those who were transfusion dependent were less likely to use hospice or used it for shorter periods than those with other cancers who were not transfusion dependent.

Rates of hospice use vary by decedent characteristics (Table 5-8). Regardless of diagnosis (blood cancer, other cancers, or no cancer), older, female, and White decedents were more likely to elect hospice in 2019 than younger, male, and non-White decedents. Differences by age and race/ethnicity in hospice enrollment were more pronounced for decedents without cancer and decedents with blood cancer than for decedents with other cancers. Hospice use was lower among dually eligible decedents with cancer than decedents with cancer who were not dually eligible, but use did not vary by dual eligibility for decedents without cancer.

Hospice enrollees with cancer received many therapeutic classes of drugs, but receipt of antineoplastic drugs was rare

Using hospice claims data from 2017, the last year in which hospices were required to report information on the drugs they furnished during hospice stays, we found that hospice providers rarely furnished antineoplastic (chemotherapy) drugs. Hospice beneficiaries with cancer did, however, commonly receive many other types of drugs.

First, to assess the completeness of data reporting, we examined what share of hospices reported at least one drug for one hospice patient in 2017. We found that approximately 90 percent of hospices (4,013 of 4,488) reported that drugs were used during hospice stays and paid for by hospice. Among the 4,013 hospices that reported at least one drug claim line in 2017, drugs were furnished, on average, for 86.6 percent of beneficiary stays (standard deviation of 18.2 percent). The rest of this analysis is restricted to beneficiary stays in these hospices.

Five therapeutic classes of drugs (central nervous system agents; analgesic, anti-inflammatory, or antipyretic agents; cardiovascular therapy agents; gastrointestinal therapy agents; and respiratory therapy agents) accounted for about 80 percent of those drug claim lines reported by hospices. Drugs in the antineoplastic therapeutic class accounted for less than 1 percent of drug claim lines in these hospices. Furthermore, antineoplastic drugs were reported by only about a third (1,411 of 4,013) of hospices that reported drug claim lines.

Next, we examined drugs reported specifically for hospice enrollees with cancer. Approximately a quarter (383,886 of 1,455,789) of hospice enrollees in 2017 had cancer as their hospice terminal diagnosis. Nearly one-fifth of hospice stays by these enrollees (71,951) had no drugs reported on their hospice claims during their stay. We are unable to discern whether these hospices actually provided no drugs to these enrollees or their hospices did not report certain types of drugs that were provided or drugs provided in certain settings of care (e.g., drugs for enrollees in GIP or drugs included in comfort packs of drugs). Approximately 30 percent of enrollees without any drugs reported were enrolled in hospice under the GIP level of care, relative to 11 percent of those with some drugs reported.

Less than 1 percent (1,628) of beneficiaries with cancer received any antineoplastic drugs in hospice. Four drugs accounted for about three-quarters of all drug claim lines for antineoplastic drugs: megestrol acetate (primarily indicated for extreme weight loss and muscle wasting due to end-stage cancer); anastrozole and letrozole (indicated for treatment of breast cancer); and bicalutamide (indicated for treatment of prostate cancer). We do not have information on whether these drugs were used for on- versus off-label indications (e.g., loss of appetite). Use of drugs in therapeutic classes other than antineoplastics was far more common among beneficiaries with cancer. The top three drugs associated with these other therapeutic classes include:

- analgesics, anti-inflammatories, or antipyretic therapeutic class—morphine sulfate, fentanyl, hydrocodone-acetaminophen (drugs primarily indicated for moderate to severe pain relief and management);
- central nervous system agents—lorazepam, haloperidol lactate, gabapentin (drugs primarily indicated for treatment of anxiety, agitation, and neuropathic pain);
- gastrointestinal therapy agents—hyoscyamine sulfate, prochlorperazine maleate, omeprazole (drugs primarily indicated for peptic ulcers, gastroesophageal reflux, drooling, nausea, and vomiting);
- respiratory therapy agents—ipratropium-albuterol, albuterol sulfate, promethazine hydrochloride (drugs primarily indicated for chronic obstructive pulmonary disease, asthma, or allergy symptom management);
- endocrine agents—dexamethasone, prednisone, levothyroxine sodium (drugs primarily indicated for treating hypothyroidism, relieving inflammations, and decreasing adverse effects of radiation therapy); and

TABLE 5–9

Antineoplastic drugs were rarely prescribed for Medicare hospice enrollees in 2017

	Share of Medicare hospice stays with ≥1 drug reported during stay among enrollees with:	
	Cancer (*n* = 317,251)	Diagnosis other than cancer (*n* = 861,797)
Type of hospice		
Freestanding	74.2%	80.1%
HHA	12.7	10.2
Hospital	12.7	9.3
Ownership type		
Nonprofit	51.8	41.0
For profit	35.9	47.4
Government	1.1	0.9
Hospice-stay level of care		
Routine home care	88.3	86.8
General inpatient care	11.0	10.2
Hospice LOS		
Mean (SD)	13.2 (9.6)	15.3 (10.7)
Median (IQR)	11 (5–20)	13 (5–26)
Share of stays, by LOS in hospice		
≤3 days	16.6	15.9
4–7 days	21.0	17.7
8–14 days	24.1	19.7
≥15 days	38.3	46.6
Share of stays with drugs provided, by therapeutic class		
Analgesic, anti-inflammatory, or antipyretic	89.4	80.5
Central nervous system agents	86.8	84.8
Gastrointestinal agents	69.1	59.2
Respiratory agents	25.6	26.2
Endocrine agents	24.5	12.2
Cardiovascular agents	20.5	32.0
Dermatological agents	8.2	11.8
Hematological agents indicated for blood thinning	3.9	5.5
Antineoplastic agents	0.5	0.2
Other	52.8	54.8

Note: HHA (home health agency), LOS (length of stay), SD (standard deviation), IQR (interquartile range). The unit of analysis is a unique beneficiary stay in a hospice. The study population includes any fee-for-service (FFS) Medicare or Medicare Advantage beneficiary with a hospice stay in 2017, regardless of whether they had a hospice stay extending past December 31, 2017. Any drug claims billed under Part D were not included in the analysis. "Other" therapeutic class includes products from therapeutic classes such as, but not limited to, chemical–pharmaceutical adjuvants, anti-infective agents, electrolyte balance–nutritional products, ophthalmic agents, genitourinary therapy, locomotor system agents, and cognitive disorder therapies. Therapeutic classification is based on the First DataBank Enhanced Therapeutic Classification System. Numbers may not sum to 100 percent due to rounding.

Source: MedPAC analysis of hospice claims, 2017.

- cardiovascular therapy agents—furosemide, spironolactone, metoprolol tartrate (drugs primarily indicated for treatment of fluid retention, high blood pressure, and heart failure).

Last, we compared the drugs that hospices furnished to enrollees with cancer versus other diagnoses. While antineoplastic drug use was rare for all enrollees, these drugs were provided both for enrollees with cancer and noncancer diagnoses, which may indicate that some of these antineoplastic drugs were used for off-label indications (e.g., management of nausea and vomiting) (Table 5-9).

Hospice enrollees with cancer rarely received blood transfusions or radiation treatments paid for outside of the hospice benefit

We analyzed data on the use of certain cancer-related services paid for outside of the hospice benefit while beneficiaries are in hospice. We focused on beneficiaries with blood cancer who may have received blood transfusions or beneficiaries with any type of cancer who may have received radiation paid for outside of the hospice benefit.

It is rare for hospice beneficiaries with cancer to receive blood transfusions or radiation paid for outside of the hospice benefit as "unrelated" to the terminal condition. In 2019:

- less than 1 percent of hospice decedents with blood cancer received a blood transfusion during hospice that was paid separately outside of the hospice benefit, and
- less than 1 percent of hospice decedents with any cancer type received radiation during hospice paid separately outside of the hospice benefit.[30]

It is unsurprising that we observe few blood transfusions and radiation services paid for outside of the hospice benefit for hospice decedents. These services are typically directed at symptoms of cancer and would likely be considered "related" to the terminal condition and thus the responsibility of the hospice if furnished to a hospice patient. Because of the data limitations discussed above, we do not know how often hospice patients received these services covered under the hospice benefit.

Among the small share of hospice patients with cancer who received blood transfusions or radiation treatments that were paid for outside of the hospice benefit, ambulance use was uncommon. A very small share of these hospice patients (less than 1 percent of those receiving radiation paid for outside of the hospice benefit and 3 percent of those receiving blood transfusions paid for outside of the hospice benefit) had an ambulance ride paid for outside of the hospice benefit on the same day.

Experiences with models of concurrent care

In general, "concurrent care" refers to models of care under which patients continue to receive conventional treatments while enrolled in hospice (or while receiving nonhospice palliative care). The structure of concurrent care models varies, ranging from models focused on specific concurrent services (e.g., dialysis for a limited period or specified number of treatments) to models that cover a broad range of conventional services while individuals are enrolled in hospice, like the VHA's. Researchers have studied a few models of concurrent care, including for patients with ESRD and cancer, both within and outside of the Medicare program. Below we summarize the literature describing the scope of the various models or approaches and researchers' evaluations of their effects (where available).

Models of concurrent dialysis care

Since 2009, the VHA, unlike Medicare, has allowed patients to continue disease-directed therapies even after enrolling in hospice as part of its Comprehensive End-of-Life Care Initiative (Ernecoff and Anhang Price 2023, Wachterman et al. 2022).[31] Wachterman and colleagues found that among veterans with ESRD, the share of patients receiving concurrent dialysis and hospice services was higher among those with VHA-financed, compared with Medicare-financed, hospice stays (42 percent vs. 25 percent).[32] Furthermore, the majority of concurrent dialysis treatments were financed by the VHA, regardless of the payer for hospice (VHA vs. Medicare) and of the primary hospice diagnosis (ESRD vs. others). The median length of stay in hospice was longer for patients who received concurrent dialysis than those who did not (43 days vs. 4 days) (Wachterman et al. 2022).

Two dialysis organizations, in Pittsburgh and Seattle, have partnered with hospices to implement models of concurrent hospice and dialysis use. These models furnish dialysis to their patients with ESRD on dialysis after they enroll in hospice. Under the models, dialysis is covered under the hospice benefit.

In Pittsburgh, Dialysis Clinic Inc. (DCI), a nonprofit dialysis organization, and the University of Pittsburgh Medical Center (UPMC) Family Hospice partnered to create the Concurrent Hospice and Dialysis Program. The program began in January 2018 to improve access to hospice and quality end-of-life care for patients with ESRD whose goals of care align with the palliative services that hospice offers but are not yet ready to stop dialysis. Patients may be referred to the program from an inpatient palliative care clinician, an outpatient dialysis clinician, or other outpatient clinician (such as primary care or subspecialty physician). The program enrolls patients with an estimated prognosis of less than two months.[33] Participating patients must also agree to continue dialysis for only a limited time. UPMC Family Hospice pays a contracted fixed rate to DCI to furnish palliative dialysis treatments to patients, up to 10 hemodialysis treatments or 30 days of PD treatments. The program stops routine blood draws and certain ESRD medications that do not address comfort. As part of this program, the hospice also covers the cost of transportation to and from the dialysis facility. Patients can receive hospice services at home, in a nursing home, or, for those with symptoms requiring more intensive management, in an inpatient hospice unit (Ernecoff et al. 2022).

According to Ernecoff and colleagues (2022), based on electronic health records data from 2018 through 2021, just under half of program participants (20 out of 43 participants) received at least one dialysis treatment, with 75 percent of these patients furnished with hemodialysis and 25 percent furnished with PD. The average number of treatments furnished was 3.5 for hemodialysis and 19.2 for PD. The authors noted that the finding that roughly half of program participants ultimately chose not to receive any dialysis treatments while in hospice may be reflective of variation in patient preferences for end-of-life care, including dialysis. The median hospice length of stay was longer for participants who received dialysis than participants who did not (13 vs. 6 days).[34] The share of program enrollees who died at home was roughly double (65 percent) the combined share of those who died in inpatient hospice (23 percent) or a nursing facility (12 percent); none died in the hospital (Ernecoff et al. 2022).

In Seattle, Northwest Kidney Centers, a nonprofit dialysis organization, began its kidney palliative care program in 2017, providing services focused on "minimizing pain, symptoms and stress" to roughly 450 patients over time (Northwest Kidney Centers 2026). In 2019, Northwest Kidney Centers partnered with Providence Hospice to create a care model that furnishes dialysis to patients with ESRD enrolled in hospice who have a prognosis of six months or less such that these patients would not have to forgo the treatment upon hospice enrollment. Cambia Health Foundation provided a two-year $180,000 grant to the dialysis and hospice partners to launch the program (Aleccia 2021). Dialysis is furnished up to three times a week for as long as the patients are enrolled and wish to continue treatment. Of the 278 patients in the kidney palliative care program between 2017 and 2023, roughly half (47 percent) utilized hospice. Approximately two-fifths of these patients who elected hospice utilized concurrent care. The median number of palliative hemodialysis treatments furnished was four. The median length of stay was longer for patients who received concurrent care than those who did not (22.5 days vs. 8 days) (University of Washington Division of Nephrology 2025).

Within Medicare, CMMI has included in its Kidney Care Choices (KCC) Model, whose goal is to improve care for patients with advanced (late-stage) kidney disease and ESRD, a waiver for the restrictions against concurrent care (e.g., dialysis) paid for outside of hospice while a beneficiary is enrolled in hospice (Negrusa et al. 2024). About 21 percent of model participants have relationships with hospice agencies, but the uptake of this waiver has not been reported in KCC Model evaluations to date.

Models of concurrent cancer care

Like veterans with ESRD, veterans with cancer can receive hospice care concurrently with cancer services, including radiation and chemotherapy (Haverhals et al. 2019). According to researchers who examined use of concurrent cancer care (radiation and chemotherapy) among decedents with cancer in the VHA who elected hospice between 2006 through 2012:

- the receipt of hospice care in the last six months of life (provided by either the VHA or Medicare) increased from 55 percent to 68 percent;
- the share of decedents receiving concurrent care chemotherapy or radiation therapy increased from 16 percent to 25 percent; and
- the median number of days between decedents' first occurrence of concurrent care and death ranged from 21 to 28 days (Mor et al. 2016).

Haverhals and colleagues (2019) interviewed clinicians and staff at VHA medical centers and community hospices about the VHA's concurrent cancer care model, and they identified several themes. First, clinician and staff interviewees described concurrent cancer care as a means of honoring care that patients valued, preserving relationships with current clinicians, and easing transitions to hospice services. Second, the presence of dedicated liaisons at the VHA provided coordination and education about concurrent cancer care. The findings from the interviews of community hospice providers were mixed. Some community hospice clinicians furnished concurrent cancer care if its intent was palliative, regardless of Medicare or the VHA paying. However, they described needing to consider overall costs when patients chose to continue chemotherapy or radiation (these hospices tended to have larger patient censuses, while other hospices relied on the VHA to offset costs). Some hospice clinicians said that concurrent care was inconsistent with hospice philosophy. Another theme from community hospice providers was the issue of ensuring that they were compliant with Medicare hospice regulations (Haverhals et al. 2019).

Egan and colleagues (2023) reported on results from a very small pilot study (10 patients) that involved providing transfusions of red blood cells and/or platelets to beneficiaries with blood cancer who were enrolled in hospice. The authors reported a hospice median length of stay of 13 days (with a range of 4 to 103 days), with all enrolled patients dying outside of the hospital (at home or in inpatient hospice). No patient received chemotherapy within 14 days of death (Egan et al. 2023).

Other approaches to concurrent care

Within Medicare, CMMI has carried out models with elements of concurrent care. The center launched a value-based insurance design (VBID) demonstration in January 2021 that tested the inclusion of hospice services in the MA benefit. Plans that participated offered hospice as part of the MA benefit package and could offer enrollees transitional concurrent hospice and conventional care (TCC), palliative care outside the hospice benefit, and hospice supplemental benefits (e.g., waiver of hospice cost sharing for drugs and respite care or additional in-home caregiver support). An evaluation of the first three years of the model reported that, of beneficiaries who elected hospice in VBID plans in 2023, less than 1 percent received TCC and 7 percent received hospice supplemental benefits (Eibner et al. 2025). Participating parent organizations (POs) varied in their approach to offering TCC: Some capped the benefit at a set number of days (e.g., 30 to 60 days), while others did not impose any limits. Most POs offered TCC to beneficiaries with specific diagnoses (e.g., ESRD, cancer, chronic obstructive pulmonary disease, recent ischemic stroke). Services furnished under TCC by POs included dialysis, transfusions, radiation therapy, paracentesis, catheter placement, chemotherapy, and immunotherapy. Based on interviews with VBID-participating POs and hospices, the evaluation cites a few reasons for the low uptake of TCC, including delayed referral to and enrollment in hospice, low awareness of TCC among providers who refer beneficiaries to hospice, beneficiary preference to not stop concurrent treatments after a set number of days, and financial disincentives for hospices to promote TCC to patients because of low payment from POs to hospices (Eibner et al. 2025).

Another example of a CMMI initiative is the ACO (Accountable Care Organization) REACH (Realizing Equity, Access, and Community Health) Program that began in 2023, in which one benefit enhancement that ACOs can offer is concurrent care for beneficiaries who elect hospice. Out of 132 ACOs in 2023, 46 chose to offer this benefit enhancement.

Finally, in 2016, CMMI launched a demonstration program called the Medicare Care Choices Model (MCCM) that permitted certain FFS Medicare beneficiaries who were eligible for hospice (but not enrolled in the Medicare hospice benefit) to enroll in the demonstration and receive palliative and supportive care from a hospice provider while continuing to receive "curative" care from other providers. Different from the FFS Medicare hospice benefit, under the MCCM demonstration, beneficiaries' regular nonhospice physicians directed their care and the hospice furnished supportive services, with FFS Medicare paying the hospice provider $400 per month (far less than the hospice payment rate of $196 per day for the first 60 days of routine home care). The MCCM focused on beneficiaries with certain terminal illnesses including cancer, congestive heart failure, chronic obstructive pulmonary disease, and HIV/AIDS. Eligibility for the MCCM was limited to beneficiaries with a life expectancy of 6 months or less who had a certain utilization and location of care (at least one hospital encounter and at least three office visits in the last 12 months; no election of hospice in the last 30 days; lived in a traditional home continuously for the last 30 days).

An evaluation of the MCCM reported that participants were more likely to enroll in hospice and to do so more days before their death than the comparison group of decedents. The evaluation also reported that MCCM enrollees were more likely to receive better quality end-of-life care (i.e., they were less likely to receive aggressive procedures, surgeries, or diagnostic tests in the last 30 days of life, and they spent more days at home on average than the matched comparison group). The final evaluation also reported, based on the experience of 5,153 MCCM enrollees who enrolled between January 2016 and June 2021 and died before December 2021, that the MCCM was associated with a 13 percent net reduction in Medicare expenditures for these beneficiaries relative to a matched comparison group due to greater hospice use and lower acute care costs at the end of life (Kranker et al. 2023). The report cautioned against broadly extrapolating from these findings because the model involved a very small number of beneficiaries and hospice providers.[35]

Comparison of hospice payments and estimated costs for certain complex palliative services

Hospice providers we interviewed and interested parties submitting responses to CMS's FY 2024 and FY 2025 hospice proposed rules indicated that the costs of services such as dialysis, radiation, and blood transfusions exceed Medicare's daily payment rate, making it challenging for hospices to furnish these services. To get a sense of how the cost of these services might compare with Medicare's payment rate to hospice providers, we compared Medicare's daily payment rate for hospice services with our estimate of the average payment FFS Medicare makes to nonhospice providers when they furnish these services to beneficiaries who are not enrolled in hospice, based on 2019 payment rates (Table 5-10). For this comparison, we estimated the average payment per treatment for dialysis, radiation, or blood transfusion in the 30 days before beneficiaries enrolled in hospice. We also calculated how commonly ambulance rides occurred in conjunction with these treatments and estimated the average payment, per day, for ambulance services.

Several caveats should be noted about our estimates of average FFS payment rates for dialysis, radiation, blood transfusions, and ambulance services. These estimates reflect FFS payment rates and do not necessarily reflect the price a hospice provider would incur when it contracts with a dialysis facility, hospital, or clinic for these services. These estimates also reflect the average payment for a radiation or blood transfusion treatment in the 30 days before a beneficiary receives hospice and may not necessarily reflect the type of radiation or blood transfusion service a beneficiary receives for palliative purposes when enrolled in hospice.

FFS payment rates for dialysis, radiation, and blood transfusions generally exceed Medicare's daily payment rate for hospice services (Table 5-10). We estimate that Medicare FFS payment rates per treatment day in 2019 averaged about $284 for dialysis, $618 for radiation, and $710 for blood transfusion.[36] In comparison, FFS Medicare's daily payment rate for hospice in 2019 was $196 (Table 5-10).[37,38] For beneficiaries who require an ambulance for transit to these treatments, FFS Medicare payments for ambulance transit averaged just over $400 per day for beneficiaries receiving dialysis and roughly $500 per day for beneficiaries receiving radiation or blood transfusions. However, it was relatively uncommon for beneficiaries to use Medicare-paid ambulance transit to these services in the 30 days before hospice enrollment: We estimate that about 12 percent of beneficiaries receiving dialysis used ambulance transit, while 5 percent of beneficiaries receiving radiation and 4 percent receiving blood transfusions had an ambulance trip on the same day when receiving these treatments.

TABLE 5–10

How FFS Medicare hospice payment rates compare with average Medicare payment for certain treatments for nonhospice patients

Service type	Medicare payment rate, 2019
Hospice	
Routine home care, days 1–60	$196 per day
Routine home care, days 61+	$154 per day
Dialysis for beneficiaries with ESRD	
Payment for dialysis	$284 per treatment
Payment for nonurgent ambulance	$412 ambulance per user per day
Blood transfusions for beneficiaries with blood cancer	
Payment for transfusion	$710 per user per day
Payment for nonurgent ambulance	$487 ambulance per user per day
Radiation treatment for beneficiaries with any cancer type	
Payment for radiation	$618 per user per day
Payment for nonurgent ambulance	$526 per user per day

Note: FFS (fee-for-service), ESRD (end-stage renal disease). We estimated the average FFS payment rate per dialysis, blood transfusion, and radiation treatment based on claims for beneficiaries with ESRD or cancer in the 30 days before hospice enrollment. The share of beneficiaries receiving an ambulance service includes those beneficiaries who received one of these services in the 30-day period before hospice enrollment. The average FFS payment for a blood transfusion reflects payments for the transfusion (Current Procedural Terminology code 36430) and red blood cells; it does not include payments for other related services such as laboratory services. For radiation treatments, we included (1) radiation therapy Healthcare Common Procedure Coding System (HCPCS) codes from the American Society of Radiation Oncology, Restructured BETOS Classification System, and the Agency for Healthcare Research and Quality's Clinical Classification Software codes; and (2) HCPCS codes associated with ablation therapy.

Source: MedPAC analysis of Medicare claims and Common Medicare Environment data.

However, because services like dialysis, radiation, and blood transfusions are furnished periodically rather than daily, we also analyzed how Medicare payments to hospices and the costs of these services compare over a hospice stay (rather than comparing payments and costs only for days when treatments are provided) to get a sense of the extent to which Medicare payment policy may pose an access barrier. Table 5-11 (p. 229) presents illustrative examples comparing Medicare's payment to hospices with proxy estimates of the cost of these treatments over the course of a hospice stay for hypothetical scenarios.

Because we lack data on the provision of these treatments during hospice stays, we modeled two illustrative scenarios for each type of treatment. Each scenario includes assumptions about hospice length of stay and treatment frequency based on what is available from the literature, stakeholder interviews, and/or our analysis of Medicare data. These assumptions were developed with input from MedPAC's staff physician. As a proxy for the cost of treatments, we used the estimated average FFS payment amount per treatment day from Table 5-10. These comparisons are meant to be illustrative only and to give a rough sense of the orders of magnitude. The illustrative scenarios are based on assumptions about treatment frequency and hospice length of stay that may not be representative of actual utilization patterns, and we use average FFS payments as a proxy for treatment costs, which may not reflect the actual costs that hospices would incur when procuring these services.

Dialysis

We modeled two scenarios based on two published studies of dialysis use during hospice stays (Table 5-11) (Ernecoff et al. 2022, Wachterman et al. 2022). Scenario 1 assumes a hospice length of stay of 13 days with an average of 3.5 dialysis treatments per stay (i.e., just under two treatments per week). Scenario 2 assumes a hospice length of stay of 47 days with an average of 15.4 treatments per stay (i.e., just over two treatments per week).[39] In the two scenarios, estimated treatment costs for dialysis amounted to roughly 40 percent to 50 percent of hospice payments. For individuals requiring ambulance transportation to dialysis, the estimated cost of dialysis plus ambulance was nearly equal to or slightly greater than Medicare hospice payments for the hospice stay.

Blood transfusions

Based on data from a small pilot program that offered blood transfusions for hospice patients, we modeled two scenarios with transfusions occurring once every two weeks (Scenario 1) and once every week (Scenario 2) (Table 5-11) (Egan et al. 2023). We assumed a hospice length of stay of 35 days, based on our analysis of the 75th percentile of hospice length of stay in Medicare data for beneficiaries with blood cancer. In the two scenarios, estimated treatment costs for blood transfusions ranged from roughly 30 percent to 50 percent of total hospice payments during the stay. For individuals requiring an ambulance for transit to a blood transfusion, the estimated cost of blood transfusions plus ambulance ranged from roughly 50 percent to 90 percent of Medicare hospice payments for the stay.

Radiation

We modeled two scenarios with different numbers of radiation treatments (Table 5-11). Scenario 1 assumes a single radiation treatment, a choice we based on feedback from clinician interviews and literature supporting the efficacy of a single fraction for palliation of pain from bone metastases in patients with poor prognoses. Scenario 2 assumes five radiation treatments, which we chose based on feedback from some clinicians we interviewed indicating that up to five treatments may be needed in some cases. We assumed a 48-day hospice stay, based on the 75th percentile length of stay for Medicare hospice patients with cancer. We did not model a shorter length of stay because our interviews with clinicians and the literature suggested that radiation is not generally indicated for pain management for individuals whose survival clinicians estimate at less than one month (Yerramilli and Johnstone 2023). Estimated treatment costs for radiation ranged from less than 10 percent (Scenario 1) to over 30 percent of total hospice payments (Scenario 2). For individuals requiring an ambulance for transit to radiation, the estimated cost of radiation plus ambulance amounted to less than 15 percent of total hospice payments in Scenario 1 and over 60 percent in Scenario 2.

While the estimates across the scenarios suggest that the costs of these treatments could constitute a substantial portion of Medicare's hospice payment (which is intended to cover all services the hospice furnishes during the stay), we note that this circumstance is not necessarily problematic in a PPS. A PPS operates under the assumption that some patients will have higher costs and some will have lower costs but that over a provider's patient population, average costs will generally align with payments. However, a mismatch between payments and costs for patients with certain conditions or characteristics can create potential access concerns if it is easy for providers to identify in advance which patients are likely to be costly and to avoid those costs by not admitting these patients or by not furnishing costly services.[40] Such a scenario may arise for some patients with ESRD or certain cancers, with the hospice payment system potentially creating a disincentive for hospice providers to furnish services such as palliative dialysis, blood transfusions, or radiation.

Potential approaches to address access to certain complex palliative services for hospice beneficiaries

Based on our interviews, literature review, and data analyses, we have identified several approaches that the Congress and the Secretary could consider if they choose to examine and address potential concerns about access to certain high-cost complex palliative services. First, we discuss enhanced data reporting for a limited period, an approach that would permit

TABLE
5–11

Illustrative scenarios comparing Medicare hospice payments and proxy estimates of costs for dialysis, blood transfusions, and radiation treatments during hypothetical hospice stays

Type of treatment and scenario	Assumptions	Assumed hospice LOS	Assumed number of treatments	Estimated Medicare payment to hospice	Proxy for cost of treatment (percent of hospice payment)	Proxy for cost of treatment and ambulance (percent of hospice payment)
Dialysis Scenario 1	Median hospice LOS and average of 3.5 dialysis treatments per stay (Ernecoff et al. 2022)	13 days	3.5	$2,548	$994 (39%)	$2,436 (96%)
Dialysis Scenario 2	Median hospice LOS and average of 15.4 dialysis treatments per stay (Wachterman et al. 2022)	47 days	15.4	$9,212	$4,374 (47%)	$10,718 (116%)
Blood-Transfusion Scenario 1	75th percentile hospice LOS for decedents with blood cancer; blood transfusion every 2 weeks (Egan et al. 2023)	35 days	3	$6,860	$2,130 (31%)	$3,591 (52%)
Blood-Transfusion Scenario 2	75th percentile hospice LOS for decedents with blood cancer; blood transfusion every week (Egan et al. 2023)	35 days	5	$6,860	$3,550 (52%)	$5,985 (87%)
Radiation Scenario 1	75th percentile hospice LOS for decedents with cancer; one radiation treatment (Yerramilli and Johnstone 2023)	48 days	1	$9,408	$618 (7%)	$1,144 (12%)
Radiation Scenario 2	75th percentile hospice LOS for decedents with cancer; 5 radiation treatments (Alcorn et al. 2024)	48 days	5	$9,408	$3,090 (33%)	$5,720 (61%)

Note: LOS (length of stay). These comparisons of Medicare hospice payments and proxy estimates of costs for dialysis, blood transfusions, and radiation treatments during hypothetical hospice stays are meant to be illustrative only and give a rough sense of magnitude. We estimated a proxy for the cost of treatment based on the average fee-for-service payment rate per dialysis, blood transfusion, and radiation treatment and per daily ambulance transport using claims for beneficiaries with end-stage renal disease or cancer in the 30 days before hospice enrollment. The average FFS payment for a blood transfusion reflects payments for the transfusion (Current Procedural Terminology code 36430) and red blood cells; it does not include payments for other related services such as laboratory services. For radiation treatments, we included (1) radiation therapy Healthcare Common Procedure Coding System (HCPCS) codes from the American Society of Radiation Oncology, Restructured BETOS Classification System, and the Agency for Healthcare Research and Quality's Clinical Classification Software codes; and (2) HCPCS codes associated with ablation therapy.

Source: MedPAC estimates for hypothetical scenarios are based on assumptions displayed in the table. Assumptions were informed by utilization patterns in published studies where available (including Ernecoff et al. (2022), Wactherman et al. (2022), Egan et al. (2023), Yerramilli and Johnstone (2023), and Alcorn et al. (2024)), clinician interviews, MedPAC analysis of Medicare claims data on 75th percentile length of stay for decedents with any cancer and blood cancer, and input from MedPAC's staff physician.

the Secretary, before considering any changes to the hospice payment system, to assess the types of high-cost complex services that hospices furnish and gauge beneficiary access to care.

Then we discuss the following two budget-neutral approaches that could be considered to improve the accuracy of the current hospice PPS:

- establishing an outlier payment mechanism for certain high-cost complex palliative services, or
- establishing an add-on payment for certain high-cost complex palliative services.

Last, we discuss a "voluntary transitional program" that would offer hospice enrollees the option to receive services such as dialysis or blood transfusions paid for outside of the hospice benefit for some transitional period or up to a specified number of treatments.

Addressing potential concerns about beneficiary access to certain high-cost complex palliative services would be a goal of modifying the hospice PPS (through an outlier or add-on payment) or launching a transitional program outside the PPS. If policymakers elect to address hospice beneficiaries' access to certain high-cost palliative services, we envision that just one of the approaches—changes to the hospice payment system or a voluntary transitional program—would be sufficient for Medicare.

Overall, in considering approaches to improve the accuracy of Medicare's payments for hospice services and address potential concerns about access to care, policymakers may wish to consider the following principles as a guide:

- maintain incentives for efficiency present in the hospice bundled-payment approach,
- target any additional payments toward providers that are furnishing high-cost complex palliative services in an efficient manner, and
- structure any changes to minimize vulnerability to fraud and abuse.

Depending on how policymakers implement changes and how the changes affect beneficiary decisions to elect hospice and utilization of hospice and nonhospice services, there could be implications for overall Medicare spending, although it is not clear whether spending would increase or decrease.[41]

Enhanced data reporting

Medicare lacks data on the provision of high-cost services by hospice providers under the hospice benefit, including what share of patients receive such services, how many of these services patients receive, and the characteristics of patients receiving these services in terms of their length of stay, level of care, and diagnoses. CMS could collect data from hospice providers about the use of certain high-cost services for a limited period (e.g., two to three years).

Such data would enable policymakers to know more about the current provision of high-cost services—such as frequency and types of patients who are furnished such services—that may be palliative among some hospice beneficiaries before considering whether the hospice payment system should be modified. In addition, if changes were made to CMS's payment for certain complex palliative services or for certain types of patients who may rely on such services, CMS would have baseline data on utilization that would help the agency structure and model new payment-policy changes and against which the effects of the policy changes could be assessed over time.

There are several straightforward options to collect additional utilization data using data-collection mechanisms that CMS already has in place for hospice and other Medicare providers. First, hospice providers could report such data on the claims they submit to CMS, similar to how dialysis facilities currently report units of ESRD drugs furnished under the ESRD PPS, as well as certain clinical measures, on the monthly claims they submit to CMS.[42,43] Hospice providers have experience submitting utilization data on Medicare claims. Between April 2014 and September 2018, CMS required line-item reporting for hospice drugs on the claims that providers submitted to the agency. Sec. 3132(a) of the Affordable Care Act of 2010 (ACA) authorized the Secretary to collect data (as needed) to revise payments for hospice care, consistent with the Commission's 2009 recommendation (Medicare Payment Advisory Commission 2009).

CMS could also collect information about the use of high-cost complex services through a web-based data-management system. Since October 2025, CMS has used a web-based platform—the Internet Quality Improvement and Evaluation System—to collect patient-level clinical data from hospice providers through the new Hospice Outcomes and Patient Evaluation (HOPE) data-collection tool. For patients under their care (at the time of their admission and other points in time), hospice providers submit information about hospice patients' physical symptoms and the impact of pain and nonpain symptoms. Although the HOPE instrument has defined data fields, CMS could consider modifying future versions of the instrument to include information related to specialized services.

Approaches to modify hospice payment policy

Medicare's current hospice payment system may create a disincentive for hospices to offer certain complex services that are palliative for certain beneficiaries. For example, FFS payment rates for dialysis, radiation, and blood transfusions generally exceed Medicare's daily payment rate for hospice services (Table 5-10, p. 227), and our illustrative examples found that the estimated treatment costs for dialysis, blood transfusions, and radiation ranged from about 10 percent to 50 percent of the total Medicare payment for a hospice stay (Table 5-11, p. 229).

We discuss below (and summarize in Table 5-12, p. 233) two alternative payment-policy approaches—high-cost outlier payments and add-on payments for certain complex palliative services—that could be considered to improve hospice payment accuracy for hospice patients receiving complex palliative services. We discuss some of the advantages, disadvantages, and design considerations associated with each approach.

Both of these approaches could be implemented in a budget-neutral manner by adjusting hospice base rates to offset the changes. Other Commission analyses have concluded that Medicare's aggregate level of hospice payments across all patients is sufficient to support high-quality care. In our March 2026 report to the Congress, the Commission found that the aggregate FFS Medicare margin was 8.0 percent across all hospice types in 2023 and projected to be about 9 percent in 2026. Based on these data and indicators of access to care, the Commission recommended no increase to the hospice base payment rates in 2027. Thus, the Commission maintains that if policymakers pursue either payment approach, it would be appropriate to do so in a budget-neutral manner without an increase to aggregate hospice payments (e.g., by making a budget-neutral reduction to the hospice base rates to offset the additional payments).

High-cost outlier payments

One approach would be to establish an outlier payment mechanism in the hospice payment system. Several of Medicare's other payment systems include high-cost outlier payments (see Appendix 5-A, p. 236). An outlier policy could direct additional payments to hospice providers that incur higher costs for providing certain complex palliative services to hospice patients (funded by a percentage reduction to the hospice base rate for all providers). This approach has several advantages. First, it would target additional payments toward only those providers that furnish complex palliative services. That is, Medicare would pay hospice providers an outlier payment when the estimated cost for outlier-eligible services (e.g., dialysis, blood transfusions, radiation) exceeds a threshold, similar to how outlier payments are computed for certain other Medicare PPSs. Second, this approach would maintain the bundled nature of the hospice payment system while improving payment accuracy, thus preserving incentives for providing efficient care and flexibility for how providers deliver care. Third, outlier payments represent shared financial risk between hospice providers and the Medicare program because these payments are typically calculated as a specified percentage of excess costs above a fixed loss amount, maintaining incentives for efficiency. On the other hand, some stakeholders (e.g., small providers) may view outlier payments, which pay for a portion of the additional costs associated with outlier-eligible services rather than the full costs, as insufficient incentive to furnish these services.

A complexity of outlier payments is that CMS must calculate the parameters of the outlier policy (e.g., a budget-neutral fixed loss amount) each year such that the estimated revenues from the reduction to the hospice base rate equals the projected amount of outlier payments. In other Medicare payment systems, the projection of outlier payments estimated by CMS has sometimes been imprecise, with actual outlier payments being less than or more than the agency projected. (See Appendix 5-A, p. 236, for discussion of outlier payment approaches in other Medicare payment systems and potential approaches for hospice.)

Add-on payment for complex palliative services

Policymakers could consider modifying the hospice payment system to include an add-on payment for the provision of certain complex palliative services based, for example, on how much FFS Medicare pays for these services outside of hospice. Under this approach, Medicare would pay hospice providers each time they furnish a complex palliative service to a patient. The advantages of this approach are that it targets additional funds only to those providers that furnish complex palliative services and it increases incentives for hospices to furnish these services. However, an add-on payment would effectively unbundle some hospice services (that is, provide the hospice with separate payment for the service on top of the hospice per diem payment amount). Over time, this action could lead to pressure to unbundle more services, weakening the structure of the hospice payment system. When the hospice payment system was developed in 1983, CMS contemplated separate payment for palliative radiation and chemotherapy but instead opted to maintain a bundled-payment approach, citing incentives for efficiency. Another potential unintended consequence of this approach is that some providers seeking higher payments might offer complex services under the hospice benefit that are not consistent with the palliative intent of the hospice benefit. That is, separately paying for certain services with an add-on payment could incentivize some providers to furnish these services even if they are not palliative or not aligned with the patient-centered plan of care. Further, it may be difficult for CMS to determine when such services are being appropriately provided to hospice patients because of the complex medical judgments associated with palliation at the end of life. Limiting the amount of add-on payments a hospice provider could receive (e.g., limiting the aggregate amount of add-on payments a provider receives or setting an add-on payment rate at a level that is lower than 100 percent of the cost of the service) may provide some program-integrity safeguards.

Other approaches

Adding a case-mix adjustment to the hospice payment system is another potential approach to address concerns about beneficiary access to certain complex palliative services. This approach might involve increasing the hospice daily payment rates for patients with certain diagnoses (ESRD, leukemia, or other cancers) who tend to use certain complex palliative services (dialysis, blood transfusions, or radiation) while decreasing the daily payment rate for those with other diagnoses. This approach would maintain the bundled nature of the hospice payment system. However, it would not significantly improve the accuracy of Medicare's hospice payments and could have unintended effects, such as creating incentives to preferentially admit patients with certain diagnoses. Further, it would benefit hospice providers that treat patients with the selected diagnoses eligible for a case-mix adjustment even if the providers do not offer complex palliative services (because Medicare policy permits hospice providers to determine whether they offer services such as dialysis, radiation, blood transfusions, and chemotherapy for palliative purposes).[44] In addition, it is unclear whether this approach would meaningfully alter incentives to furnish high-cost services because the magnitude of the increase in the payment rates for certain diagnosis groups could be modest, especially if only a small proportion of beneficiaries in the diagnosis group (e.g., patients with ESRD) receive high-cost services or only a small proportion of hospices offer the service (e.g., dialysis).

Voluntary transitional program

Certain services identified by CMS—such as dialysis and blood transfusions—may fall in a gray area of being both palliative and life extending for some hospice beneficiaries, who may be concerned that ceasing these treatments could quickly result in death. Clinicians, hospice providers, and family members we interviewed stated that concern about ceasing these treatments before entering hospice led some patients who wished to enroll in hospice to forgo or delay hospice enrollment. Hospices that did offer these treatments to patients indicated that the possibility of receiving the treatments made it easier for the beneficiary to elect hospice and that, once enrolled in hospice, beneficiaries often chose to receive few treatments.

TABLE 5–12

Alternative policy approaches to modify the Medicare hospice payment system to address complex palliative services

Policy option description	Advantages	Disadvantages/complexities
1. High-cost outlier payment		
Create a high-cost outlier payment within the hospice payment system, in which Medicare pays providers who furnish certain complex palliative services an outlier payment for a portion of costs above a fixed loss amount	• Targets funds to providers furnishing these services • Maintains bundled nature of hospice payment system • Involves sharing of cost by provider and government, which helps retain incentives for efficiency	• Some stakeholders may view compensating providers for only a portion of their higher cost as insufficiently increasing incentives to furnish these services • May be subject to imprecision in estimation of budget-neutral fixed loss amount
2. Add-on payment for high-cost services		
Provide an add-on payment to hospices within the hospice payment system, in which Medicare pays providers who furnish certain complex palliative services a payment in addition to the daily hospice payment rate	• Targets funds to providers furnishing these services • Would increase incentives to furnish these services	• Unbundles some hospice services, which could increase pressure to unbundle more services over time, potentially undermining the structure of the payment system • Potential for inappropriate provision of services by some hospice providers, spurred by additional payments • Program-integrity safeguards could be challenging to successfully implement

Source: MedPAC analysis of Medicare's fee-for-service payment policies and payment systems.

To address potential concerns about access to hospice care for beneficiaries who are dependent on dialysis and blood transfusions, the Congress or the Secretary through CMMI could develop a transitional program that offers hospice enrollees the option to receive dialysis or blood transfusions paid for outside of the hospice benefit for some transitional period or up to a specified number of treatments. Such a structure would give dialysis- or blood transfusion–dependent beneficiaries who are near the end of life and wish to wean off these treatments while enrolled in hospice an opportunity to do so. If a hospice enrollee used the specified number or full duration of dialysis or blood transfusion treatments available in the transitional program, the patient would remain in hospice unless the patient chose to voluntarily disenroll.

A transitional program would be a type of concurrent care. In general, "concurrent care" refers to models of care under which patients continue to receive conventional treatments while enrolled in hospice (or while receiving nonhospice palliative care).[45] The structure of concurrent care models varies, ranging from models focused on specific concurrent services (e.g., dialysis for a limited period or specified number of treatments) to models that cover a broad range of conventional services while individuals are enrolled in hospice, like the VHA does. The transitional program we describe has similarity with efforts by providers or CMMI to focus on concurrent care for specific services motivated by potential concern about access to hospice for certain types of patients (see Table 5-13 (p. 234) for an overview of these approaches and the section "Experiences with models of concurrent care" (p. 223)).

TABLE 5–13

Continuum of concurrent care approaches

Organization	Patient population	Approach: Narrow or broad	Are patients enrolled in hospice?
Provider based			
UPMC/DCI	ESRD	Narrow: Hospice services and concurrent dialysis (specified number of treatments)[a]	Yes
Providence Hospice/ Northwest Kidney Centers	ESRD	Narrow: Hospice services and concurrent dialysis (no limit on number of treatments)	Yes
CMS/CMMI			
KCC Model	FFS late-stage kidney disease or ESRD beneficiaries	Narrow: Organizations with waiver may offer hospice services and concurrent care[b]	Yes
VBID	MA beneficiaries	Broad: Hospice services, transitional concurrent care, and supplemental benefits[c]	Yes[c]
MCCM	FFS beneficiaries with cancer, congestive heart failure, chronic obstructive pulmonary disease, or HIV/AIDS	Broad: Hospice services and concurrent care	Hospice eligible but not enrolled in hospice
ACO REACH	FFS beneficiaries	Broad: Hospice services and concurrent care	Yes

Note: UPMC (University of Pittsburgh Medical Center), DCI (Dialysis Clinic Inc.), ESRD (end-stage renal disease), CMMI (CMS Innovation Center), KCC (Kidney Care Choices), FFS (fee-for-service), VBID (value-based insurance design), MA (Medicare Advantage), MCCM (Medicare Care Choices Model), ACO (accountable care organization), REACH (Realizing Equity, Access, and Community Health). For more details on these models, see the section "Experiences with models of concurrent care" (p. 223).

[a] The program enrolls patients with an estimated prognosis of less than two months. UPMC Family Hospice pays a contracted fixed rate to DCI to furnish palliative dialysis treatments to patients, up to 10 hemodialysis treatments or 30 days of peritoneal dialysis treatments. The program stops routine blood draws and certain ESRD medications that do not address comfort.

[b] CMS makes available to kidney contracting entities (KCEs) a conditional waiver of the requirement that beneficiaries who elect hospice agree to forgo conventional treatments for their terminal condition outside of hospice. The KCE identifies to CMS the specific services to include in the benefit enhancement.

[c] In addition to hospice services and transitional concurrent care for hospice enrollees, the model also involved palliative care for nonhospice enrollees.

Source: MedPAC analysis of concurrent care models implemented by provider-based organizations and CMS.

One collaborative program developed by a dialysis provider and a hospice provider located in Pennsylvania furnishes up to 10 palliative dialysis sessions concurrent with hospice services (Ernecoff et al. 2022). In another program, a Seattle dialysis facility partnered with a hospice to create a care model that furnishes dialysis up to three times weekly to patients with ESRD who are enrolled in hospice without a specified limit on how long patients can continue dialysis treatments.

CMMI has previously tested some models that have offered participants (FFS providers or MA plans) the flexibility to offer concurrent care to hospice enrollees for certain services, but this flexibility has been an element of the models and not the focus (Table 5-13). Both the KCC and ACO REACH models (that began in 2022 and 2023, respectively) offered participating organizations the option to furnish concurrent care to hospice enrollees with ESRD (KCC model) or concurrent services more generally (ACO REACH), but little is known about the extent to which concurrent care was utilized in these models. In the hospice component of the MA VBID model, participating plans furnished hospice services and were required to offer some form of transitional concurrent care. Participating plans had discretion over which type of concurrent services to include and any limits; some chose to cover dialysis or transfusions. According to the evaluation, uptake of transitional concurrent care among hospice enrollees was lower than expected. Plans and hospices cited factors such as delayed hospice referrals, limited awareness of the option among referring providers, beneficiary preferences, and concerns about MA payment rates for concurrent care (Eibner et al. 2025). CMMI also tested the Medicare Care Choices Model in which hospice-eligible beneficiaries who were not enrolled in hospice could receive limited palliative care services while remaining in conventional care.

Building on its efforts in this area, CMMI could consider developing and testing a model that directly focuses on hospice and transitional concurrent care for patients who are dialysis or transfusion dependent. This approach would give CMS the opportunity to design a model that directly tests transitional concurrent care for hospice enrollees in a limited fashion for services about which access concerns have been raised by stakeholders. While dialysis and blood transfusions are a logical starting point for a focused test of transitional concurrent care, CMS could consider whether there are other services such as palliative radiation that would benefit from inclusion in such a model.[46] The effect of a voluntary transitional program on beneficiaries' use of hospice and on overall Medicare spending is not known but could be studied under a CMMI model. In developing a model, the agency would need to consider a number of issues, including how to structure the transitional program (what length of time or number of treatments would be appropriate, whether a beneficiary could receive the transitional benefit only once or could receive it more than once if disenrolled from and reenrolled in hospice); how to design the model to promote close collaboration between the specialist administering the transitional treatments and the hospice physician; and how to design the model to minimize the potential for unintended financial incentives or undermining the hospice benefit criteria. With respect to dialysis, an additional issue that could be explored is whether a transitional benefit could be structured to offer nephrologists the flexibility to provide palliative dialysis (fewer treatments per week and fewer medicines and lab studies, if that is better suited to the patient's comfort) without it adversely affecting their quality metrics.[47] ■

APPENDIX

5-A

High-cost outlier payments: Medicare precedents and potential approaches for hospice

Outlier payments in other Medicare payment systems

A high-cost outlier mechanism exists in several Medicare prospective payment systems (PPSs), including the inpatient hospital prospective payment systems (IPPS), long-term care hospital (LTCH) PPS, inpatient rehabilitation facility (IRF) PPS, end-stage renal disease (ESRD) PPS, hospital outpatient PPS (OPPS), and home health agency (HHA) PPS. Medicare's fee-for-service (FFS) PPSs with an outlier policy generally share the following features:

- The estimated cost for a case or service(s) is compared with the Medicare payment amount.
- Medicare pays the provider an additional amount equal to a percentage of the excess costs above the fixed loss amount for those cases or services in which the estimated cost exceeds the payment by more than a specified fixed loss amount.
- Medicare structures outlier payments to be budget neutral in aggregate, funded through a prospective percentage reduction to the base payment rate(s) of the PPS.

Some of the dimensions on which outlier approaches vary across Medicare's FFS payment systems pertain to:

- what services are eligible for an outlier payment,
- what type of data sources are used to estimate providers' costs for outlier services, and
- how budget neutrality is implemented and the target amount of spending that outlier payments would account for.

The ESRD PPS and IPPS provide examples of the different ways that outlier-payment approaches are structured. The ESRD PPS takes a targeted approach to outlier payments: Only certain services are eligible for outlier payments, and CMS estimates the provider's cost of outlier-eligible services reported on a claim using external sources of cost data (e.g., FFS payment rates for similar services in other Medicare payment systems). In contrast, the IPPS takes a broad approach to what services are eligible for outlier payments by estimating the total cost of all services reported on the claim for an individual patient. The IPPS uses an estimate of the hospital's cost for a case by taking the hospital's reported charges on the claim multiplied by the hospital's overall cost-to-charge ratios (CCRs) from its cost report.[48] The two payment systems also differ on what share of payments is directed to outliers, with the ESRD PPS targeting 1 percent and IPPS targeting about 5 percent of total payment for outliers.[49]

Hospice outlier payments: Policy-design and implementation considerations

Below we discuss the key design choices and operational issues that policymakers would need to consider if they established an outlier approach in hospice.

Services eligible for an outlier payment

One key element of an outlier approach is the choice of services that are eligible for outlier payments. Across Medicare payment systems, the scope of services eligible for outlier payments varies. In the IPPS, OPPS, LTCH, and IRF PPSs, the services eligible for outlier payments are broad. For example, the IPPS has an outlier for all services associated with high-cost stays. In contrast, home health outliers pertain to whether the number of visits provided is an outlier compared with other providers. In the ESRD PPS, CMS makes outlier payments for only certain services—drugs, laboratory services, and other items that facilities had billed for separately under the prior payment system.[50]

If the goal of adding outlier payments to the hospice payment system is to address concern about access to certain high-cost services like dialysis, blood transfusions, and radiation that are palliative for some patients, an outlier approach that applied only to selected services would be a focused and efficient way to address that goal. While any outlier approach would increase data reporting for providers, an approach that focuses on selected services would minimize the additional data-reporting burden. An approach to outliers that focuses on a select group of services might give rise to requests for additional services to be considered for outliers. CMS could establish criteria and processes for considering such requests (e.g., by establishing a technical expert panel and notice and comment rulemaking).

Alternatively, CMS could consider a broad approach to outlier payments for hospices that would make all services provided by hospices eligible for outlier payments, similar to the IPPS. With a broad approach, CMS would not need to designate what services are eligible for outlier payments. However, a broad approach may not direct outlier payments toward the service types that may be of most concern from an access and quality perspective. Program integrity might also be more difficult for CMS to monitor under a broad approach. In addition, implementation of a broad approach would require changes to the hospice cost-report form and could involve substantially more data reporting by providers on claims and cost reports than they currently do.[51]

Below, we discuss policy-design choices for an outlier policy focused on select services because such an approach would likely better address the concern about access to certain complex palliative services than a broad approach that is focused on an entire stay.

Data used to estimate the costs of outlier-eligible services

How CMS estimates the provider's cost of a service or case for purposes of determining outlier eligibility varies across Medicare's FFS payment systems:

- In the IPPS, LTCH PPS, IRF PPS, and OPPS, CMS estimates costs using charges reported on claims, multiplied by a CCR from the provider's cost report.
- In the HHA PPS, the cost of the case is estimated based on the number and mix of visits provided; standard labor cost amounts per minute and type of visit are applied.[52]
- In the ESRD PPS, CMS estimates a provider's costs for drugs based on external price measures used in other Medicare payment systems (i.e., the average sales price plus 6 percent for Part B drugs, national average pricing data from the Medicare Prescription Drug Plan Finder for other drugs, payment rates from the Clinical Laboratory Fee Schedule for laboratory tests, and prices established by the local Medicare administrative contractors for medical/surgical supplies).

Relying on external data sources to estimate a provider's cost of furnishing specific services for outlier-calculation purposes may be the simplest and most efficient approach for hospice. Using a standardized, objective measure of the cost of a service would lessen the potential for an outlier system to be vulnerable to fraud and abuse and help maintain incentives for hospices to efficiently contract for these services. For example, CMS could use FFS Medicare payment rates to nonhospice providers as an estimate of the cost of services—such as the average FFS payment rate for a dialysis treatment, blood transfusion, or radiation service. This approach would be similar to the approach used in the ESRD PPS.

Alternatively, CMS could use a provider-specific CCR approach, but doing so would require CMS to make changes to the hospice cost-report form. CMS would need to add charges to the hospice cost-report form and break out or restructure certain cost categories to align with services eligible for outlier payments, which may increase providers' administrative burden. Using a CCR approach would also likely necessitate more oversight and auditing of the hospice cost reports from CMS and the agency's administrative contractors than currently exists. In addition, a CCR approach may involve retroactive reconciliations of outlier payments for some providers. For example, under the IPPS, CMS initially uses a provider's CCR from a prior cost-report period when calculating outlier payments. If the hospital's CCR (for operating costs) for the period in which the service was actually furnished differs substantially from the historical ratio used and the total outlier amount exceeds a threshold, CMS will retroactively reconcile the outlier payments (Centers for Medicare & Medicaid Services 2025a).

Parameters of outlier payments and budget neutrality

Outlier mechanisms rely on several parameters designed to achieve budget neutrality. They include:

- a prospective percentage reduction to the base rate intended to fund outlier payments in a budget-neutral fashion (across Medicare's FFS payment systems, this reduction ranges from 1 percent under the ESRD and OPPS to 8 percent under the LTCH standard payment system);
- a fixed dollar loss amount (and percentage loss amount in the case of the OPPS) that must be exceeded before a case or service(s) qualifies for outlier payments; and

- a percentage of estimated costs above the fixed loss amount that Medicare pays (this share varies by payment system—from 50 percent in the OPPS to 80 percent in several payment systems (e.g., IPPS, ESRD PPS, IRF PPS, LTCH PPS, and home health PPS)).[53]

Establishing these parameters for a newly established hospice outlier policy would involve a combination of policy judgment and data analysis. For example, determining the share of costs above the fixed loss amount that would be paid by Medicare is purely a policy judgment: It reflects a decision about how to balance the goals of providing additional payments for unusually high-cost services and maintaining incentives for efficiency.

CMS would need utilization data on outlier-eligible services to establish reasonable parameters for an outlier policy and set them at levels that would result in budget neutrality. CMS currently does not have patient-level data on the provision of hospice services (other than visits) on hospice claims. As discussed previously, several options exist for obtaining additional data on the provision of specific services. One approach is to require hospices to report utilization of selected services that would be eligible for outlier payments (via Healthcare Common Procedure Coding System codes) on Medicare claims for a few years before implementing a new outlier approach (see section "Enhanced data reporting," p. 230). This approach is similar to CMS, in 2025, obtaining additional data to support expanding services that are eligible for ESRD outlier payments.

If only a small number of hospice beneficiaries currently receive certain complex palliative services, utilization data that CMS collects may indicate that only a very modest prospective adjustment to the hospice base rate would be needed to fund outlier payments in a budget-neutral manner. Over time, however, utilization of outlier-eligible services may increase in response to the availability of outlier payments. Growing utilization and payments for outlier services would typically be addressed by raising the fixed loss amount in subsequent years so that projected outlier payments equal the same target percentage of aggregate payments established in prior years. After several years of experience with outlier payments, CMS could also reassess the initial parameter it established for the targeted percentage reduction to the base payment rate in light of observed utilization and consider whether that percentage remains appropriate or warrants adjustment.

Alternatively, if there is concern that current use of certain complex palliative services is low and limits CMS's ability to set reasonable initial parameters for an outlier policy, CMS could consider adopting a different approach before implementing an outlier system. CMS could consider temporarily paying hospices for these services separately to generate more complete utilization data. After this limited period of separate payment, CMS could transition to a budget-neutral outlier policy using the utilization data gathered during that period. ■

Endnotes

1 "Chemotherapy" in this chapter refers to both chemotherapy and immunotherapy unless otherwise specifically referenced.

2 Beneficiaries who elect hospice agree to forgo Medicare payment for treatments for their terminal condition and related condition outside of hospice. These disease-directed services are commonly referred to as "curative" or "conventional" care. The term "curative" in this context is not meant to imply that the disease-directed services are expected to cure the hospice beneficiary's terminal illness. For example, we note that dialysis does not cure end-stage renal disease; rather, it is a life-sustaining treatment that filters waste and excess fluids for individuals with this illness.

3 CMS sought comment on what specific financial risks or costs are of particular concern to hospices that would prevent the provision of high-cost palliative treatments and what would address those risks; whether there should be parameters around when palliative treatments should qualify for a different type of payment; whether CMS should consider defining "palliative services" more specifically with regard to high-cost treatments; whether there should be documentation that all other palliative measures have been exhausted before billing for a higher-cost treatment; and whether there should be separate payments for different types of higher-cost palliative treatments or one standard payment for any higher-cost treatment.

4 Throughout this chapter, we use the phrase "complex palliative services" to refer to the services that CMS raised in its rulemaking for beneficiaries with complex palliative needs: dialysis for patients with ESRD and radiation, blood transfusions, and chemotherapy for cancer patients (Centers for Medicare & Medicaid Services 2023). Our analyses focus on these four treatments; consideration of other treatments for beneficiaries with complex palliative needs is outside our scope. However, in our interviews, we note that some clinicians mentioned other complex palliative services that may raise similar issues (e.g., ventilators for patients with amyotrophic lateral sclerosis, certain drugs for heart failure and certain other cardiovascular conditions (e.g., certain inotropes), and procedures to insert drains for fluid buildup).

5 The *Medicare Benefit Policy Manual* states that services that are "completely unrelated" to the terminal condition are eligible for FFS coverage outside of hospice. In addition, the policy manual states specifically for beneficiaries with ESRD that "if the patient's terminal condition is unelated to ESRD, the patient may receive covered services under both the ESRD benefit and the hospice benefit" (Centers for Medicare & Medicaid Services 2026a, Centers for Medicare & Medicaid Services 2026b).

6 CHC is intended to manage a short-term symptom crisis in the home and involves eight or more hours of care per day, at least half of which is nursing care. IRC is care in a facility for up to five days to provide an informal caregiver a break. GIP is provided in a facility on a short-term basis to manage symptoms that cannot be managed in another setting. Unless a hospice provides CHC, IRC, or GIP on any given day, it is paid at the RHC rate.

7 There are two exceptions in which the number of visits furnished affects Medicare's hospice payment rate. For CHC, Medicare pays the hospice provider an hourly rate rather than a per diem rate. To qualify for CHC payment on a given day, the hospice provider must furnish at least eight hours of visits to a particular patient, with at least 50 percent being nurse visits. For RHC in the last seven days of life, Medicare pays the hospice provider the standard RHC daily rate and an additional amount for registered nurse or social worker visits based on an hourly rate. In both of these cases, payment is not affected by the amount of nonvisit services furnished.

8 The hospice per diem includes payment for the administrative services of the hospice medical director or a hospice physician member of the interdisciplinary group (e.g., for review and updating of plans of care, supervising care and services, and establishing governing policies). However, if the beneficiary's designated attending physician furnishes a professional service related to the terminal condition to the beneficiary (e.g., an evaluation and management visit), Medicare will make a separate payment for the physician service. If the attending physician is employed by the hospice, Medicare Part A will make a separate payment to the hospice for each attending physician professional service. If the attending physician is independent, Medicare Part B will make a separate payment to the attending physician for the professional service.

9 A palliative approach to dialysis care prioritizes comfort and minimizing symptom burden (over life prolongation) by aligning treatment with the patient's goals of care (Grubbs et al. 2014). Patients on maintenance dialysis may experience, on average, 7.5 symptoms (Davison et al. 2006). A common difference between conventional (i.e., maintenance) versus palliative approaches to dialysis care, according to our interviews with hospice providers, includes the treatment frequency (three vs. fewer treatments per week) and modifications to ESRD prescriptions and lab tests.

10 Sekeres and colleagues indicated, however, that this recommendation was based on "very low certainty of the evidence of effects." They wrote that they did not find any

studies specific to blood transfusions in older adults with acute myeloid leukemia who were no longer receiving antileukemic therapy. They stated that they relied on two published systematic reviews of the literature for broader populations and that most studies in the systematic reviews were case studies involving noncomparative data (Sekeres et al. 2020).

11 When a hospice provider furnishes a complex palliative service like dialysis, radiation, or blood transfusions that is related to the patient's terminal condition, the hospice provider typically arranges for another provider (e.g., a hospital, clinic, or dialysis facility) to furnish the service to the hospice enrollee. In that situation, the hospice provider is responsible for paying the other provider furnishing the treatment based on a rate negotiated between the hospice and the other provider.

12 According to Sec. 410.40 of the Code of Federal Regulations, "The beneficiary's condition must require both the ambulance transportation itself and the level of service provided in order for the billed service to be considered medically necessary. Nonemergency transportation by ambulance is appropriate if either: the beneficiary is bed-confined, and it is documented that the beneficiary's condition is such that other methods of transportation are contraindicated; or, if his or her medical condition, regardless of bed confinement, is such that transportation by ambulance is medically required." In addition, under Medicare ambulance coverage policy, nonemergency ambulance transport is covered only between certain types of health care facilities or locations.

13 One interviewee discussed what considerations are given to structuring payment for palliative dialysis in which the intensity or frequency of dialysis is reduced.

14 The cost of providing radiation may vary by the number of fractions and the negotiated payment rate between a hospice and radiation center.

15 A number of physicians and hospices noted that before hospice enrollment, some blood-cancer patients may receive transfusions several times per week. Some of the hospice clinicians we interviewed stated that they did not view that frequency of transfusion services as being consistent with the philosophy of hospice care.

16 Hospices were required between April 2014 and September 2018 to report drugs used during hospice stays on FFS hospice claims, but they are no longer required to do so.

17 A number of analyses focus on 2019, the last year before the pandemic, but some analyses use other years (2017, 2023, and 2024) depending on data availability and the objective of the analysis.

18 "Concurrent care" refers to models of care under which patients continue to receive conventional treatments while enrolled in hospice (or while receiving nonhospice palliative care).

19 According to an analysis of enrollment in hospice between 2000 and 2014 among nearly 771,000 Medicare decedents who were on hemodialysis, 20 percent of beneficiaries received hospice services at the time of their death during this period, with hospice use increasing from 11 percent of decedents with ESRD in 2000 to nearly 27 percent in 2014; the median length of stay in hospice was five days; about 42 percent of decedents with ESRD who elected hospice did not do so until the last three days of life; and hospice use was higher among older and White decedents with ESRD relative to younger and non-White decedents with ESRD (Wachterman et al. 2018). An earlier study of hospice use among beneficiaries on dialysis found that, between January 2001 and December 2002, 14 percent of the 115,239 decedents had enrolled in hospice (Murray et al. 2006). Murray and colleagues reported higher hospice use for older and White decedents with ESRD than younger and non-White decedents with ESRD, similar to findings by the Commission and Wachterman and colleagues (2018).

20 Under Medicare policy, the ESRD PPS pays for the delivery of maintenance outpatient dialysis. During our interviews, we learned that some dialysis providers may be reluctant to furnish palliative dialysis (e.g., fewer treatments per week) under the ESRD benefit because of its potential to affect the facility's clinical performance under the ESRD PPS's Quality Incentive Program.

21 USRDS Study of Treatment Preferences is a survey conducted among patients dialyzing at 31 nonprofit facilities in the greater Seattle and Nashville areas between 2015 and 2018 and was funded by the National Institute of Diabetes and Digestive and Kidney Diseases as part of the USRDS Special Study Center on Palliative and End-of-Life Care.

22 In addition to these prognostic tools for patients with ESRD on dialysis, some researchers have also developed prognostic tools for individuals with CKD Stages 4 and 5 (Schmidt et al. 2019).

23 A systematic review by White et al. (2017) reported that the accuracy of the surprise question was variable. Across 22 studies examined, the authors found a wide range of sensitivity (11.6 percent to 95.6 percent), specificity (13.8 percent to 98.2 percent), positive predictive value (13.9 percent to 78.6 percent), negative predictive value (61.3

percent to 99 percent), and *c*-statistic (0.512 (poor) to 0.822 (good)) (White et al. 2017).

24 The area under the curve (AUC) for six-month survival from this prognostic model was 0.87 (95 percent confidence interval (CI) 0.82 to 0.92). The AUCs for 12- and 18-month survival were 0.82 (95 percent CI 0.76 to 0.88) and 0.79 (95 percent CI 0.73 to 0.86, respectively).

25 For those who elected hospice, the use measures reflect the beneficiary's last year of life in which use may have occurred either before or during hospice enrollment.

26 The only claims data available on hospice enrollees' use of high-cost services are for those services paid for outside of the hospice benefit. FFS Medicare pays for these services outside of hospice when they are reported to be unrelated to the terminal condition. We lack any data to analyze the characteristics of decedents with ESRD in hospice who received dialysis that the hospice paid for.

27 We identified renal disease with the following principal International Classification of Diseases–10 diagnosis codes for their hospice episode: E1121, E1122, E1129, I120, I129, I130, I1310, I1311, I132, N181, N183, N184, N185, N186, N189, and N19. Among hospice decedents with ESRD who received dialysis paid for outside of the hospice benefit and had renal disease as their terminal condition, 44 percent had an I-code or E-code as their hospice primary diagnosis, and the remaining 56 percent had an N-code. Among hospice decedents with ESRD who did not receive dialysis paid for outside of the hospice benefit and had renal disease as their terminal condition, 31 percent had an I-code or E-code as their hospice primary diagnosis, and the remaining 69 percent had an N-code.

28 For the purposes of this analysis, we classified the following International Classification of Diseases–10 diagnosis codes as blood cancer: C90-C96 and D46, excluding codes that indicated the condition was in remission.

29 We focused on red blood cell transfusions because some hospice and cancer clinicians we interviewed indicated that red blood cell transfusions may be palliative for some hospice patients with blood cancers; platelets, on the other hand, were not generally viewed by those we interviewed as having a palliative role in hospice.

30 We excluded any treatment received on the day of hospice election.

31 According to Mor and colleagues (2016), "The VHA Comprehensive End-of-Life Care Initiative was designed to ensure reliable access to hospice and palliative-care services at all VHA facilities and to build an infrastructure for long-term sustainability of high-quality end-of-life care. In less than three years, the VHA tripled the number of veterans provided with home hospice care, enhanced access to inpatient VHA palliative care, and built a nationwide network of partnerships with community hospice programs."

32 Wachterman et al. (2022) adjusted for age, race, sex, residence (rural/urban), and proximity to a VHA facility, and they included Veterans Integrated Service Networks fixed effects in their logistic regression models comparing the share of VHA-financed versus Medicare-financed patients receiving concurrent dialysis and hospice services.

33 According to Ernecoff and colleagues, "This [two-month] criterion was chosen for this pilot project due to financial feasibility and to create an argument more likely to be accepted for policy changes. Ideally, a program like this would be offered to patients with a longer prognosis (e.g., 6 months)" (Ernecoff et al. 2022).

34 The maximum number of days enrolled in hospice was 76 for participants who received dialysis compared with 17 days for participants who stopped dialysis when entering hospice.

35 According to the report, "A small percentage of all hospices nationwide volunteered to participate in MCCM, with only five hospices enrolling about half the beneficiaries. Further, the beneficiaries enrolled in MCCM represent a small percentage of the beneficiaries who, according to Medicare claims and enrollment data, lived near a participating hospice during model implementation and satisfied the model eligibility criteria but were neither referred to the model nor enrolled. The enrollees were also notably different from nonparticipating beneficiaries before matching, more often having cancer and high rates of Medicare expenditures" (Kranker et al. 2023).

36 The average FFS payment for a blood transfusion reflects payments for the transfusion (Current Procedural Terminology code 36430) and red blood cells; it does not include payments for other related services such as laboratory services. For radiation treatments, we included (1) radiation therapy Healthcare Common Procedure Coding System (HCPCS) codes from the American Society of Radiation Oncology, Restructured BETOS Classification System, and the Agency for Healthcare Research and Quality's Clinical Classification Software codes; and (2) HCPCS codes associated with ablation therapy.

37 For purposes of this analysis, we assume a hospice payment rate of $196 per day, the payment rate for RHC for the first 60 days of a hospice stay. RHC accounts for more than 99 percent of hospice days. In 2019, Medicare paid $196 per day

for hospice RHC for the first 60 days of a hospice stay and $154 per day for days 61 and beyond. For this analysis, we chose the rate for days 1 to 60 because hospice patients with ESRD and cancer tend to have shorter stays.

38 The Commission found positive indicators of payment adequacy for outpatient dialysis payments in the year of our analysis, 2019, and in the years since then (Medicare Payment Advisory Commission 2026b, Medicare Payment Advisory Commission 2021).

39 The dialysis treatment frequency of roughly two treatments per week reported in these studies reflects dialysis provided for palliative purposes while beneficiaries were enrolled in hospice. This amount is different from the frequency of maintenance hemodialysis treatments furnished to beneficiaries who are not enrolled in hospice (which is typically three times per week). In interviews with nephrologists and palliative care physicians, we heard that palliative dialysis frequency is guided by what will help ease a particular patient's symptoms and may involve fewer treatments per week than maintenance dialysis.

40 In general, Medicare has a variety of approaches it can employ to help ensure that appropriate care is received under a PPS, such as (1) quality reporting programs and patient experience-of-care surveys (e.g., Hospice Quality Reporting Program and Hospice Consumer Assessment of Healthcare Providers and Systems); (2) program monitoring or oversight (e.g., the ESRD claims-based monitoring program); and (3) pay-for-performance approaches utilized in some payment sectors.

41 Currently, we lack data on the provision of complex palliative services by hospice providers. Even if we had data on current provision of these services, it is unknown whether and by how much potential Medicare payment-policy changes would affect election of hospice, hospice length of stay and utilization of complex palliative services, and use of nonhospice Medicare services.

42 The ESRD PPS does not pay separately for ESRD-related drugs (with the exception of new drugs that are paid for under an add-on payment for a limited period). Rather, the base payment rate for each dialysis treatment covers all operational and capital costs that providers incur for furnishing a dialysis treatment, including ESRD-related drugs with nursing services, dialysis equipment and supplies, social services, and certain laboratory tests.

43 Dialysis facilities report the following clinical measures on monthly claims submitted to CMS: dialysis adequacy reading (the dialysis patient's Kt/V (the ratio of total volume of blood cleared of urea to the total volume of fluid in the body)); anemia levels (the dialysis patient's hematocrit level); type of vascular access used (vascular catheter, arteriovenous graft, arteriovenous fistula only); patient height and weight; and "time on machine," defined as the number of minutes that hemodialysis is provided (i.e., the minutes spent dialyzing) (Centers for Medicare & Medicaid Services 2024a).

44 For example, under this approach, a provider that elected not to furnish dialysis to a given patient with ESRD (because the provider viewed dialysis as not consistent with the patient-centered plan of care or because the provider did not offer the specialized service) would still be paid a higher case-mix-adjusted payment.

45 Ernecoff and Anhang Price describe concurrent care as allowing "select disease-directed therapies to facilitate transitions to hospice, with the aim of promoting goal-concordant care" (Ernecoff and Anhang Price 2023).

46 Although according to interviewees, palliative radiation generally does not affect life expectancy, interviewees reported that access to palliative radiation can influence the timing of hospice enrollment, with some patients delaying hospice entry to receive treatment. Interviewees also noted that the need for radiation may arise during a hospice stay, such as pain associated with a newly symptomatic bone metastasis. Because radiation may be needed mid-hospice stay, a transitional program may be less well suited to palliative radiation than to blood transfusions or dialysis. However, it may be possible to structure a transitional program to include palliative radiation—for example, by defining the transition in terms of a number of radiation treatments rather than a fixed time period.

47 Under the ESRD Quality Incentive Program, the PPS bundled-payment rate is reduced by up to 2 percent for dialysis facilities that do not achieve or make progress toward specified quality measures.

48 Under the IPPS, Medicare pays hospitals for both operating and capital costs. The IPPS outlier policy incorporates both operating and capital costs into the outlier calculation and uses two hospital-specific CCRs—an operating CCR and capital CCR—to calculate a hospital's operating and capital costs for a case. The hospital's operating and capital CCRs come from the most recent tentative or final settled cost report. Under certain circumstances, CMS may substitute a statewide average CCR for a hospital-specific CCR if the Medicare administrative contractor is unable to determine an accurate operating or capital CCR for a hospital (Centers for Medicare & Medicaid Services 2025a).

49 Under the IPPS, CMS sets the national fixed loss amount at the level it estimates will result in outlier payments equaling the target operating offset of 5.1 percent (plus a projection for outlier reconciliation, which is 0.04 percentage points in 2026).

50 Effective 2025, ESRD drugs and biological products that were or would have been included in the composite rate before the establishment of the ESRD PPS became eligible for outlier payments (Centers for Medicare & Medicaid Services 2025c).

51 At a minimum, a broad approach to estimating costs for a case that involves multiplying total charges on the claim by a hospital-specific CCR would require changes to the hospice cost report to include total charges. However, from a policy and program-integrity perspective, more disaggregated information on charges and costs by type of service could be beneficial, permitting an understanding of which types of services are driving outlier payments. As a result, this approach may involve more data reporting by hospices on claims and cost reports than providers currently do.

52 Medicare's HHA PPS limits the amount of outlier payments an individual HHA can receive to no more than 10 percent of the agency's total Medicare home health payments (Centers for Medicare & Medicaid Services 2025b).

53 Under the IPPS, the percentage of costs paid above the fixed loss amount is generally 80 percent, but for burn diagnosis-related groups it is 90 percent.

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